

*W. G. Smith*  
4-27-44

---

VIII.—*A Synonymic List of the Ants of the Ethiopian Region.* BY WM. M. WHEELER

IX.—*A Synonymic List of the Ants of the Malagasy Region.* BY WM. M. WHEELER

---

BULLETIN

OF

THE AMERICAN MUSEUM OF NATURAL HISTORY

VOL. XLV, pp. 711-1055.

*New York*

*Issued October 25, 1922*

---

Extracted from 'Ants of the American Congo Expedition.  
A Contribution to the Myrmecology of Africa.' By William Morton Wheeler, with the collaboration of J. Bequaert, I. W. Bailey, F. Santschi, and W. M. Mann. Parts I-IX.

# VIII.—A SYNONYMIC LIST OF THE ANTS OF THE ETHIOPIAN REGION

By WM. M. WHEELER

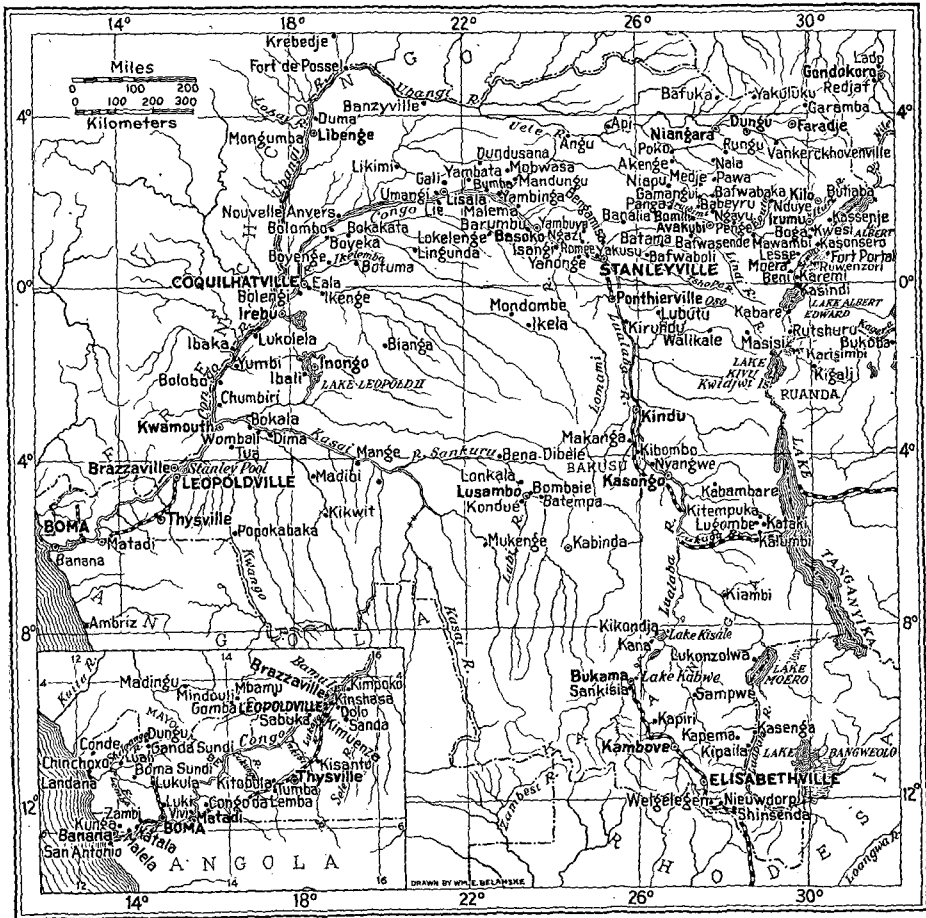
The following catalogue of the known Ethiopian and Malagasy Formicidæ had its inception in an attempt to master the abundant and widely scattered literature as a basis for the study of the Congo ants collected by Messrs. Lang, Chapin, and Bequaert. The attempt was the more urgent because no general list had been published since the appearance of the seventh volume of Dalla Torre's '*Catalogus Hymenopterorum*,' which included the forms known in 1890. He cites only 228 Ethiopian and 119 Malagasy species. It will be seen that the numbers have risen during the past thirty years to 920 and 237 respectively, almost exclusively as the result of the untiring labors of five myrmecologists: Mayr, Emery, Forel, Santschi, and Arnold. Had the varieties and subspecies been included in the foregoing estimates, the numbers would be still more impressive. Those who may believe that little entomological exploration has been carried out in the dark continent will also be astonished when they scan the lists of localities and the names of the collectors who have secured the materials for the taxonomists. It almost seems as if ant-collectors had been more numerous and more diligent in Africa than in North America!

I have endeavored to include all the literature on Ethiopian and Malagasy ants down to January 1st, 1920, together with some of the papers that have since appeared, but no claim for completeness is made for this year. Except in a very few instances the references have been checked up with the original papers by Dr. Bequaert, who has also gone to much pains in looking up species not contained in my original list, in arranging the species and genera and in many other ways relieving me of the meticulous and often exasperating labor of giving the catalogue its present appearance.

The localities recorded for the various forms have been grouped geographically according to the political divisions in use at the beginning of 1914. So far as possible the spelling of the geographical names has been made uniform throughout, though this has been very difficult owing to the typographical and other errors so numerous in taxonomic papers.

With Emery and other zoologists I have called the category below the species "subspecies," not "race," or "stirps," as is the custom with Forel, Santschi and Arnold. I have, moreover, given both the subspecific and varietal names the same gender as the corresponding specific names, departing in this respect from the procedure of other myrmecologists, who treat the subspecific or at least the varietal name as feminine,

irrespective of the gender of the specific name. My reasons for this departure are two-fold: First, ornithologists, mammalogists, herpetologists and others who employ trinomials make the subspecific as well as the specific names agree with the generic name in gender, and I am unable



MAP 47. Showing localities in the Belgian Congo where ants have been collected.

to see why quadrinomials should be treated differently. Second, the status of the specific, subspecific and varietal categories in myrmecography are still in a state of flux, and since different writers and even the same writer on different occasions are in the habit of exalting varie-

ties or subspecies to specific rank and degrading species to varietal or subspecific rank—a process which must continue till knowledge of a particular species-complex sufficient to establish the precise dignity of its various categories is attained—it is obviously preferable to keep the names all of one gender.

The confusion introduced into the literature by this at present unavoidable inconsistency and instability in the employment of specific, subspecific and varietal names makes it necessary in the compilation of such a catalogue as the following to choose between different appreciations or even to rely altogether on one's own interpretation. This is particularly the case in dealing with large, complex genera such as *Pheidole*, *Crematogaster*, *Monomorium*, *Tetramorium*, *Camponotus*, and *Polyrhachis*. I gladly admit that my judgment may have been at fault in several of my appraisals of taxonomic status, especially of forms unknown to me in nature. A catalogue, however, is not a place for disputation or the weighing of evidence but merely a condensed expression of a small fragment of our present taxonomic knowledge, compiled under rigid limitations of space and conventions of arrangement. That my work will be subjected to criticism by those who have never attempted to deal with a similar body of taxonomic literature, is to be expected, but I am certain that students will find it very useful, at least till it is absorbed at some future time in a much ampler and more perfect conspectus of the Ethiopian and Malagasy ant-fauna.



APPROXIMATE LOCATION OF AFRICAN LOCALITIES, RIVERS, MOUNTAINS,  
LAKES, ETC., MENTIONED IN THE CATALOGUE OF ETHIOPIAN ANTS  
AND ELSEWHERE IN THE PAPER<sup>1</sup>

Ababis.—22° 10' S., 15° 45' E.	Ambelokudi.—Near Pawa, Belgian Congo.
Abaja (L.).—6° 30' N., 38° E.	Amboni (R.).—0° 20' S., 36° 55' E.
Abba (I.).—13° 20' N., 32° 40' E.	Ambriz.—7° 45' S., 13° 5' E.
Aberdare (Mts.).—0° 30' S., 37° E.	Amu (R.).—7° 20' N., 1° 10' E.
Aberdeen.—32° 25' S., 24° 5' E.	Angra Pequena.—26° 40' S., 15° 10' E.; same as Lüderitz Bay.
Aberio.—10° N., 44° 35' E.	Angu.—3° 30' N., 24° 20' E.
Abo.—5° 30' N., 6° 25' E.	Annobon (I.).—1° 15' S., 6° E.
Abo (R.).—4° 15' N., 9° 45' E.	Anseba (R.).—15° to 17° 10' N., 38° 45' to 39° E.
Abou.—8° 50' N., 38° 35' E.	Antongil Bay.—15° 30' S., 49° 50' E.
*Abuker.—Near Dire Dawa, Abyssinia.	Aouache (R.), same as Hauash (R.).
Aburi.—5° 45' N., 0° 10' W.	Api.—3° 40' N., 25° 25' E.
Addah.—5° 55' N., 0° 35' E.	Arasab (R.).—26° 55' to 27° 10' S., 16° 15' to 16° 35' E.
Aden.—12° 50' N., 45° E.	Arigalgalu.—4° 25' N., 39° 55' E.
Adi Caie.—14° 50' N., 39° 20' E.	Artesia.—24° 5' S., 26° 20' E.
Adis-Abeba.—9° N., 38° 45' E.	Arusha-chini.—3° 35' S., 37° 25' E.
Adi Ugri.—14° 55' N., 38° 50' E.	Arussi Galla, Ganale Gudda.—7° 30' N., 40° 15' E.
Adua.—14° 10' N., 38° 55' E.	Aruwimi (R.).—1° 20' N., 27° 40' E.
Agege.—6° 40' N., 3° 20' E.	Asmara.—15° 20' N., 39° E.
Agouagon.—8° N., 2° 20' E.	Assab.—13° 5' N., 42° 50' E.
*Aguagua.—Lower Dahomey. Probably misspelling for Agouagon.	Assinie.—5° N., 3° 20' W.
Aikota.—15° 10' N., 37° 5' E.	Assuan.—24° 5' N., 32° 50' E.
Ain (Mt.).—12° 45' N., 33° 5' E.	Atbara (R.).—12° 30' to 17° 40' N., 34° to 37° E.
Akaki (R.).—8° 50' N., 38° 40' E.	Athi Plain.—1° 20' S., 37° 10' E.
Akenge.—2° 55' N., 26° 50' E.	Auata (R.).—5° 15' to 6° N., 38° 50' to 39° 10' E.
Akono Linga.—3° 55' N., 12° 45' E.	Avakubi.—1° 20' N., 27° 40' E.
Akra.—5° 40' N., 0° 15' W.	
Akropong.—6° N., 0° 5' W.	Babeyru.—1° 55' N., 27° 40' E.
Akwapim (Mts.).—5° 50' N., 0° 20' W.	Bachi-Shombe.—4° 55' S., 20° 35' E.
Albany.—33° 20' S., 26° 25' E.	Bafuka.—4° 20' N., 27° 50' E.
Albert Edward (L.).—0° to 0° 30' S., 29° 30' E.	Bafwabaka.—2° 10' N., 27° 50' E.
Alen.—2° 5' N., 11° E.	Bafwalipa.—1° 30' N., 27° 45' E.
Algoa Bay.—33° 45' S., 25° 45' E.; same as Port Elizabeth.	Bafwasende.—1° 10' N., 27° 15' E.
Algota.—15° 45' N., 38° 55' E.	Bagamoyo.—6° 25' S., 38° 55' E.
Alto Queta.—9° 15' S., 14° 55' E.	Baguirmi.—12° 20' N., 15° to 17° E.
Amani.—5° 5' S. 38° 40' E.	
Amanzimtoti.—30° 5' S., 30° 50' E.	
Amarr Burgi.—5° 25' N., 37° 55' E.	
Amatongas Forest.—19° S., 33° 40' E.	
Ambás Bay.—4° N., 9° 10' E.	

<sup>1</sup>Localities marked with an asterisk have not been found on any map.

- Bahr-el-Salaam.—12° 55' to 13° 50' N., 36° 10' to 37° 30' E.
- \*Bakaie.—Between Nyangwe and Stanleyville, Belgian Congo.
- Bakusu.—3° 35' S., 25° 30' E.
- Balgowan.—29° 20' S., 30° 5' E.
- Balla Balla.—20° 25' S., 29° 20' E.
- \*Balli Neck Pass.—Ex-German Southwest Africa.
- Bamako.—12° 40' N., 7° 55' W.
- \*Bamayanga.—Belgian Congo.
- Bamba.—7° S., 13° 40' E.
- Bambaya.—10° 45' N., 13° 35' W.
- Bamu (I.).—4° 25' S., 15° 30' E.
- Banalia.—1° 30' N., 25° 40' E.
- Banana (Lower Congo).—6° S., 12° 20' E.
- Banana (Ituri Forest).—1° 20' N., 29° 15' E.
- Banas.—3° 55' N., 40° 15' E.
- Bangala, see Nouvelle Anvers.
- Bangweolo (L.).—11° S., 30° E.
- Banza Masola.—5° 10' S., 13° E.
- Banzville.—4° 15' N., 21° 10' E.
- Barawa.—1° 5' N., 44° 5' E.
- Barberton.—25° 50' S., 31° E.
- Bargunett (R.), Mt. Kenia.—0°, 37° E.
- Barikiwa.—9° 30' S., 37° 55' E.
- \*Barko.—Abyssinia.
- Barombi (L.).—4° 40' N., 9° 25' E.
- Barumbu.—1° 10' N., 23° 20' E.
- Basoko.—1° 20' N., 23° 35' E.
- Bassam, see Grand Bassam.
- Bass Marle, see Stephanie (L.).
- Bass Narok, see Rudolf (L.).
- Basutoland.—28° 35' to 30° 35' S., 27° 5' to 29° 20' E.
- Bata.—1° 50' N., 9° 45' E.
- Batama.—1° N., 26° 40' E.
- Batanga.—2° 50' N., 9° 55' E.
- Batempa.—5° S., 23° 45' E.
- Bathurst.—13° 30' N., 16° 45' W.
- \*Batiamponde.—Near Stanleyville, Belgian Congo.
- Bawi (I.).—6° 10' S., 39° 5' E.
- \*Bazen.—Abyssinia.
- \*Beach Bush.—Near Durban, Natal.
- \*Bedza. — Matoppo Hills, Southern Rhodesia.
- Beira.—20° S., 35° E.
- Bela.—4° N., 41° 30' E.
- Belingwe.—20° 25' S., 30° E.
- Bembesi (R.).—19° to 20° S., 28° to 29° 30' E.
- Bena Dibele.—4° S., 22° 45' E.
- Bena Makima.—4° 45' S., 20° 45' E.
- \*Benda.—French Congo.
- Bendo.—6° 55' N., 11° 15' W.
- Bengamisa.—1° N., 25° 10' E.
- Benguela.—12° 30' S., 13° 20' E.
- Beni.—0° 20' N., 29° 40' E.
- Benin.—6° 20' N., 5° 40' E.
- Benito (R.).—1° 35' N., 9° 35' E.
- Benue (R.).—8° N., 7° to 10° E.
- Berbera.—10° 25' N., 45° 5' E.
- \*Bergvliet.—Cape Flats, Cape Colony.
- Bethanien.—26° 30' S., 17° 10' E.
- \*Betutu. — Maringa-Lopori District, Belgian Congo.
- Bianza.—1° 25' S., 20° 10' E.
- Bibundi.—4° 15' N., 9° E.
- Bihunga.—0° 20' N., 30° 5' E.
- Bindura.—17° 25' S., 31° 25' E.
- Bipindi.—3° 5' N., 10° 25' E.
- \*Bisa Timo.—Near Harar, Abyssinia.
- Bismarckburg.—8° 5' N., 1° 20' E.
- Bismarckhügel.—3° 5' S., 37° 30' E.
- Bissao.—11° 45' N., 15° 40' W.
- Bissis (I.).—11° 45' N., 16° 5' W.
- Bizen (Mt.).—15° 20' N., 39° 10' E.
- Blantyre.—15° 45' S., 35° 5' E.
- Bloemfontein.—29° 5' S., 26° 10' E.
- Blue Cliff.—33° 30' S., 25° 25' E.
- Blue Nile (R.).—11° 15' to 15° 40' N., 32° 25' to 35° E.
- Blue Post.—1° 5' S., 37° 10' E.
- \*Bobi.—Near Gali, Belgian Congo.
- \*Boda.—French Congo.
- Boga.—1° N., 30° E.
- Bogos.—15° 50' N., 38° E.
- Bokakata.—1° 10' N., 19° 25' E.
- Bokala.—3° 15' S., 17° 5' E.
- Bolengi.—0° 5' S., 18° 10' E.
- Bolobo.—2° 15' S., 16° 15' E.

- Bolombo.—1° 25' N., 18° 55' E.  
 Boma.—5° 50' S., 13° 10' E.  
 \*Boma Gombe.—German East Africa.  
 Boma Sundi.—5° 20' S., 12° 50' E.  
 Bombaie.—4° 50' S., 23° 35' E.  
 Bomili.—1° 30' N., 27° 20' E.  
 Bondei.—5° 20' S., 38° 50' E.  
 Bonjongo.—4° 5' N., 9° 10' E.  
 Bonny (R.).—4° 25' to 4° 45' N., 7° 10' E.  
 Boran Galla, Upper Ganale.—4° 30' N., 39° 30' E.  
 \*Borda.—French Congo.  
 \*Boro (R.).—Darbanda, French Congo.  
 Bothaville.—27° 20' S., 26° 35' E.  
 Botuma.—0° 30' N., 19° 30' E.  
 Bourka.—9° 25' N., 41° 15' E.  
 Boyeka.—1° 10' N., 19° 5' E.  
 Boyenge.—0° 25' N., 18° 45' E.  
 Boyulu.—1° N., 27° E.  
 Brazzaville.—4° 25' S., 15° 20' E.  
 Buarsangueli.—10° 50' N., 48° E.  
 Bububu.—6° 5' S., 39° 20' E.  
 Buddu Forest.—1° S., 31° 40' E.  
 Buditu.—5° 25' N., 38° 30' E.  
 Bugalla (I.).—0° 30' S., 32° 15' E.  
 Buiko.—4° 42' S., 38° E.  
 Bujongolo.—0° 20' N., 29° 55' E.  
 Bukama.—9° 15' S., 25° 40' E.  
 Bukoba.—1° 30' S., 32° E.  
 Bularli.—7° 55' N., 43° 30' E.  
 Bulawayo.—20° 10' S., 28° 50' E.  
 Bumba.—2° 10' N., 22° 30' E.  
 \*Bunthorne Mine. — Near Bulawayo, Rhodesia.  
 Bura.—3° 30' S., 38° 18' E.  
 Butiaba.—1° 50' N., 31° 30' E.  
 Butiti.—0° 45' N., 30° 20' E.  
 Buzubizi.—0° 20' N., 32° 5' E.  
 Caconda.—13° 45' S., 15° E.  
 Cairo.—30° 12' N., 31° 10' E.  
 Caledon.—34° 10' S., 19° 25' E.  
 Camayenne.—9° 25' N., 13° 40' W.  
 Cameroon (Mt.).—4° 15' N., 9° 10' E.  
 Cameroon (R.).—3° 55' N., 9° 35' E.  
 Campo.—2° 20' N., 9° 50' E.  
 Campo Tembo.—3° 5' S., 38° 10' E.  
 \*Candolo.—Belgian Congo.  
 Cape Cross.—21° 45' S., 13° 55' E.  
 Cape Flats.—Near Cape Town, Cape Colony.  
 Cape Lopez.—0° 40' S., 8° 45' E.  
 Cape Mount.—6° 45' N., 11° 25' W.  
 Cape of Good Hope.—34° 15' S., 18° 30' E.  
 Cape Palmas.—4° 30' N., 7° 35' W.  
 Cape Town.—33° 55' S., 18° 25' E.  
 Cape Verde.—14° 35' N., 17° 50' W.  
 Casamance (R.).—12° 40' N., 14° to 16° 45' W.  
 \*Cawston Farm.—On Umgusa R., Southern Rhodesia.  
 Ceres.—33° 25' S., 19° 20' E.  
 Chacansengula.—0° 20' N., 31° 55' E.  
 Chakamakue.—23° 45' S., 22° 5' E.  
 Chake Chake, Pemba Island.—5° 15' S., 39° 45' E.  
 Chama.—5° N., 1° 40' W.  
 Changamwe.—4° 2' S., 39° 35' E.  
 \*Changmane, probably Changamwe.  
 Chania (R.).—0° 40' to 1° 10' S., 36° 50' E.  
 Charlestown.—27° 25' S., 29° 55' E.  
 Cheik Osman.—12° 55' N., 45° E.  
 Cheteni.—4° 5' S., 39° 40' E.  
 Chikai.—5° 50' S., 12° 25' E.  
 Chinchoxo.—5° 15' S., 12° 15' E.  
 Chirinda (Mt.).—21° S., 32° 45' E.  
 Chumbiri.—2° 40' S., 16° 15' E.  
 \*Ciama.—Southern Rhodesia.  
 Coffee (Mt.).—6° 30' N., 10° 35' W.  
 \*Colba (R.).—Abyssinia.  
 Colenso.—28° 45' S., 29° 50' E.  
 \*Comba Ibre.—French Congo.  
 \*Combra Tora.—French Congo.  
 Conde.—5° 5' S., 12° 15' E.  
 Congo da Lemba.—5° 40' S., 13° 40' E.  
 Constantia, near Cape Town.—34° 5' S., 18° 25' E.  
 Conway.—31° 45' S., 25° 15' E.  
 Coquilhatville.—0° 1' N., 18° 20' E.  
 Coromma.—5° 30' N., 38° E.  
 Cubango (R.).—12° 30' to 20° S., 16° 15' to 22° 30' E.

\*Cucala.—Portuguese West Africa.

Cuito (R.).—12° 35' to 18° S., 18° to 20° 30' E.

Dakar.—14° 40' N., 17° 35' W.

Damba (I.).—0°, 32° 50' E.

Danakil.—12° N., 42° E.

Daouele.—8° 45' N., 44° 5' E.

Darbanda.—7° 40' N., 21° 35' E.

Daressalaam.—6° 50' S., 39° 15' E.

Daua (R.).—4° to 5° 20' N., 39° 10' to 42° E.

De Aar.—30° 40' S., 24° 5' E.

Deep (R.).—34° 5' S., 18° 25' E.

\*Degabolla.—Abyssinia.

Delagoa Bay.—26° S., 32° 40' E.

\*Denge.—Near Niangara, Belgian Congo.

Diagbe (R.).—4° 30' N., 28° 25' E.

Dibele.—4° S., 22° 45' E.; same as Bena Dibele.

Dima.—3° 20' S., 17° 20' E.

Dimbroko.—6° 40' N., 4° 55' W.

Dimé.—5° 35' N., 36° 50' E.

Diré Daua.—9° 40' N., 41° 50' E.

Djebel Akhmed Aga.—11° N., 33° E.

Djebel Hakim.—9° 25' N., 42° 25' E.

Djiye (L.).—3° 35' S., 37° 45' E.

Djoungou.—9° 45' N., 1° 50' E.

Djur (R.).—8° N., 28° E.

Dolo.—4° 25' S., 15° 25' E.

\*Dongola.—Eritrea.

Duala.—4° N., 9° 40' E.

\*Dukudu.—Zululand.

Duma.—3° 50' N., 18° 35' E.

Dunbrody.—33° 30' S., 25° 30' E.

Dundusana.—2° 45' N., 22° 20' E.

Dungu, Mayombe.—4° 45' S., 12° 55' E.

Dungu, Uele.—3° 30' N., 28° 30' E.

Durban.—29° 50' S., 31° E.

Eala.—0° 1' N., 18° 25' E.

East London.—33° S., 27° 55' E.

Ebolowa.—2° 55' N., 11° 5' E.

\*Edeloud.—Kordofan Desert, Anglo-Egyptian Sudan.

Efulen.—2° 40' N., 10° 45' E.

\*Ekeneli.—Near Metit, Cameroon.

Eket.—4° 35' N., 7° 55' E.

\*Elat.—Near Metit, Cameroon.

El Burgon.—0° 15' S., 35° 50' E.

\*El Hefera.—On the Settiti, Anglo-Egyptian Sudan.

Elisabethville.—11° 45' S., 27° 40' E.

Ellahelaj.—7° N., 49° 20' E.

Eloby (I.).—1° N., 9° 30' E.

Endessa.—8° 40' N., 40° E.

Entebbe.—0° 5' N., 32° 30' E.

\*Entendweni.—Zululand.

Epulu (R.).—1° 20' N., 28° 40' E.

Erdal.—5° 30' N., 48° 45' E.

Error-es-Saghir.—9° 30' N., 44° 5' E.; same as Hargeisa.

Estcourt.—29° S., 29° 50' E.

\*Esuk Ekkpo Abassi.—Eket District, Nigeria.

\*Etombe.—Cameroon.

Ettoke.—4° 40' N., 39° E.

Faf Plain.—6° 30' N., 44° 10' E.

Falaba.—9° 45' N., 11° 20' W.

Faradje.—3° 40' N., 29° 40' E.

Fariala.—1° 25' N., 28° E.

Fashoda.—10° N., 32° E.

\*Fello.—Senegambia.

Fernando Po.—3° 30' N., 8° 30' E.

Fikilini, near Stanleyville.

Forcados (R.).—5° 20' N., 5° 35' to 6° 20' E.

Fort Archambault.—9° 5' N., 18° 35' E.

Fort Crampel.—7° 10' N., 9° 20' E.

Fort de Possel.—5° N., 19° 15' E.

Fort Hall.—0° 50' S., 37° 15' E.

Fort Johnston.—14° 30' S., 35° 15' E.

Fort Portal.—0° 45' N., 30° 15' E.

Fort Sibut.—5° 55' N., 19° E.; same as Krebedje.

Freretown.—4° 3' S., 39° 40' E.

Fundu (I.).—5° 5' S., 39° 40' E.

Gaboon (R.).—0° 10' to 0° 30' N., 9° 20' to 10° 10' E.

\*Galago (L.).—Northern Ruanda, German East Africa.

Gali.—2° 25' N., 21° 35' E.

Gamangui.—2° 10' N., 27° 20' E.

- Ganale Gudda (R.).—5° 25' to 6° N., 39° to 40° 45' E.  
 Ganana (R.), see Ganale (R.).  
 Ganda Sundi.—4° 50' S., 12° 50' E.  
 Garamba.—4° 10' N., 29° 40' E.  
 Gawieb.—22° 45' S., 15° 10' E.  
 Gazi.—4° 25' S., 39° 30' E.  
 Gebelein, White Nile.—12° 35' N., 32° 45' E.  
 George.—33° 55' S., 22° 30' E.  
 Ghinda.—15° 35' N., 39° E.  
 \*Ghrab el Aish.—Anglo-Egyptian Sudan.  
 Giari Bule.—5° 55' N., 38° 50' E.  
 Gilgil.—0° 30' S., 36° 20' E.  
 \*Gischin.—Southern Arabia.  
 Giuba (R.).—0° 10' S. to 4° 5' N., 42° 30' E.  
 \*Glatkop. — Little Namaland, Cape Colony.  
 Gobabis.—22° 25' S., 18° 55' E.  
 \*Goda.—French Congo.  
 Godo Burka.—9° 5' N., 39° 25' E.  
 Gogfale.—9° 50' N., 41° 20' E.  
 Golah.—7° 5' N., 8° 35' W.  
 Golungo Alto.—9° 5' S., 14° 55' E.  
 Gomba.—4° 10' S., 14° 20' E.  
 Gomod.—15° 35' N., 39° 10' E.  
 Gondokoro.—4° 50' N., 31° 45' E.  
 Gordon Bay.—34° 10' S., 18° 50' E.  
 Gorée (I.).—14° 40' N., 17° 30' W.  
 Gorongoza.—18° 30' S., 34° E.  
 Gotta.—9° 35' N., 41° 20' E.  
 Grahamstown.—33° 15' S., 26° 35' E.  
 Grand Bassa.—5° 45' N., 10° W.  
 Grand Bassam.—5° 10' N., 3° 50' W.  
 Grand Batanga.—2° 50' N., 9° 55' E.  
 Grand Lahou.—5° 10' N., 5° W.  
 \*Greymine.—Natal.  
 Grootfontein.—19° 35' S., 18° 55' E.  
 Gubbet.—11° N., 47° 50' E.  
 \*Guengera.—Pungwe Valley, Portuguese East Africa.  
 Gwaai.—19° 20' S., 27° 40' E.  
 Haitajwa Cave.—6° 15' S., 39° 15' E.  
 Hamman's Kraal.—25° 25' S., 28° 15' E.  
 Harar.—9° 25' N., 42° 25' E.  
 Hargeisa.—9° 30' N., 44° 5' E.  
 Hartley.—18° 10' S., 30° 30' E.  
 Hauacio.—5° N., 39° E.  
 Hauash (R.).—8° 25' to 11° 40' N., 38° 25' to 41° 30' E.  
 Hebron.—25° 30' S., 27° 55' E.  
 Herrer.—9° 40' N., 41° 20' E.  
 Herschel.—30° 40' S., 27° 15' E.  
 \*Hička Bourka.—Abyssinia.  
 Hillside, near Bulawayo.—20° 10' S., 28° 50' E.  
 Himo (R.), Mt. Kilimanjaro.—3° 10' to 3° 35' S., 37° 35' E.  
 Hoima.—1° 35' N., 31° 30' E.  
 Homran.—14° 25' N., 36° 10' E.  
 Hope Fountain.—20° 20' S., 28° 55' E.  
 Hopetown.—29° 35' S., 24° 5' E.  
 Ibadan.—7° 25' N., 3° 55' E.  
 Ibaka.—1° 35' S., 16° 40' E.  
 Ibali.—2° S., 18° 10' E.  
 Ibanda.—0° 20' N., 30° 5' E.  
 Ibo.—12° 25' S., 40° 35' E.  
 Ihulu (R.), same as Epulu (R.).  
 Ikela.—1° S., 23° 10' E.  
 Ikelemba (R.).—0° 20' N., 18° 15' to 20° 20' E.  
 Ikenge.—0° 5' S., 18° 35' E.  
 \*Imbokro.—Ivory Coast. Probably misspelling of Dimbroko.  
 \*Ingfal.—Abyssinia.  
 Inhambane.—23° 55' S., 35° 35' E.  
 \*Injolo. — Equator District, Belgian Congo.  
 Inkisi (R.).—4° 40' to 6° 15' S., 15° to 15° 35' E.  
 Inongo.—1° 55' S., 18° 20' E.  
 Irebu.—0° 35' S., 17° 50' E.  
 \*Iringui.—Belgian Congo.  
 Irumu.—1° 20' N., 30° E.  
 \*Isalinio. — Mpororo, German East Africa.  
 Isangi.—0° 50' N., 24° 15' E.  
 Isipingo.—30° S., 30° 50' E.  
 Issawe.—2° 35' S., 29° 45' E.  
 Itigi.—5° 45' S., 34° 30' E.  
 Ituri (R.).—1° 30' N., 26° to 30° E.  
 Jabassi.—4° 30' N., 9° 55' E.  
 Jacquleville.—5° 15' N., 4° 25' W.

- Johann-Albrechtshöhe.—4° 40' N., 9° 25' E.  
 Johannesburg.—26° 10' S., 28° E.  
 Junk (R.).—6° 5' to 6° 30' N., 9° 35' to 10° 25' W.  
 Kabambare.—4° 40' S., 27° 45' E.  
 Kabanza, Lovoi R.—8° 15' S., 26° 30' E.  
 Kabare.—0° 35' S., 29° 30' E.  
 Kabinda.—6° 10' S., 24° 20' E.  
 Kabwe (L.).—9° 20' S., 25° 50' E.  
 Kadjura, Unyoro.—1° 40' N., 31° 20' E.  
 \*Kafogo.—Limba, Sierra Leone.  
 Kagera (R.).—1° to 2° 30' S., 30° to 31° 50' E.  
 Kahe, Mt. Kilimanjaro.—3° 30' S., 37° 25' E.  
 \*Kaibo.—Uganda.  
 Kairouan.—35° 40' N., 10° 5' E.  
 \*Kaka.—Schoa, Abyssinia.  
 Kaka, White Nile.—10° 40' N., 32° 15' E.  
 \*Kakir.—Kalahari.  
 Kakoulima (Mt.).—9° 40' N., 13° 25' W.  
 \*Kalanga.—On the Upper Lukuga, Belgian Congo.  
 \*Kalumba.—Belgian Congo. Probably Kalumbi.  
 Kalumbi.—5° 50' S., 28° 35' E.  
 Kamaggas.—29° 45' S., 17° 25' E.  
 Kambove.—10° 50' S., 26° 35' E.  
 Kamiti (R.).—1° 5' S., 36° 50' E.  
 Kampala.—0° 20' N., 32° 20' E.  
 Kana.—8° 25' S., 26° 20' E.  
 Kandahar (I.), Zambesi R.—17° 55' S., 25° 35' E.  
 Kang.—23° 40' S., 22° 45' E.  
 Kapema.—10° 40' S., 28° 20' E.  
 \*Kapinga.—Belgian Congo.  
 Kapiri.—10° 15' S., 26° 20' E.  
 Karagwe.—1° to 2° S., 31° E.  
 Karemi.—0° 5' N., 29° 40' E.  
 Karisimbi (Mt.).—1° 30' S., 29° 25' E.  
 Karoli (Mt.).—3° 55' N., 37° 30' E.  
 Karssa.—9° 25' N., 41° 35' E.  
 Kasai (R.).—3° to 10° S., 16° to 22° E.  
 Kasenga.—10° 15' S., 28° 45' E.  
 Kasengui.—0° 20' N., 31° 40' E.  
 Kasindi.—0°, 29° 40' E.  
 Kasongo.—4° 20' S., 26° 25' E.  
 Kasonsero.—1° N., 30° 10' E.  
 Kassala.—15° 25' N., 36° 25' E.  
 Kassenje.—1° 25' N., 30° 30' E.  
 Katak, Katanga.—5° 45' S., 29° E.  
 Katala.—6° S., 12° 45' E.  
 Katende.—0° 15' N., 32° 25' E.  
 \*Katumba.—Belgian Congo.  
 Kavirondo Bay.—0° 20' S., 34° 30' E.  
 Kawa, White Nile.—13° 45' N., 32° 30' E.  
 Kazungula.—17° 50' S., 25° 5' E.  
 Kenia (Mt.).—0° 20' S., 37° 25' E.  
 Kentani.—32° 30' S., 28° 20' E.  
 Keren.—15° 45' N., 38° 30' E.  
 Kerreri.—15° 45' N., 32° 30' E.  
 Kgokong.—24° 15' S., 23° E.  
 Khakhea.—24° 40' S., 23° 25' E.  
 Khami (R.).—20° 15' S., 28° E.  
 Khartum.—15° 40' N., 32° 35' E.  
 Khutu Steppe.—7° 30' S., 38° E.  
 Kiambi.—7° 20' S., 27° 55' E.  
 Kibombo.—4° S., 26° E.  
 Kibonoto, Mt. Kilimanjaro.—3° 15' S., 37° 10' E.  
 Kibosho.—3° 15' S., 37° 20' E.  
 Kibwezi.—2° 25' S., 37° 55' E.  
 Kifumbiro.—1° 15' S., 31° 25' E.  
 Kigali.—2° S., 30° E.  
 \*Kigerama.—Near Kagera R., German East Africa.  
 Kihenga.—5° 45' S., 37° 35' E.  
 Kijabe.—0° 55' S., 36° 35' E.  
 Kika.—9° 15' N., 2° 45' E.  
 Kikondja.—8° 10' S., 26° 25' E.  
 Kikuyu.—1° 15' S., 36° 45' E.  
 Kikwit.—5° 25' S., 18° 50' E.  
 Kilema.—3° 20' S., 37° 30' E.  
 Kilimanjaro (Mt.).—3° S., 37° 20' E.  
 Kilindini.—4° S., 39° 45' E.  
 Kilo.—1° 55' N., 30° E.  
 \*Kilongalanga.—Near St. Gabriel, Belgian Congo.  
 \*Kimaha.—Gold Coast.  
 Kimberley.—28° 45' S., 24° 45' E.  
 Kimpoko.—4° 10' S., 15° 40' E.  
 Kimuenza.—4° 25' S., 15° 20' E.

- Kinangop.—0° 35' S., 36° 30' E.  
 Kindia.—10° N., 12° 45' W.  
 Kindu.—3° S., 26° E.  
 King William's Town.—32° 50' S., 27° 25' E.  
 Kiniati.—5° 20' S., 13° E.  
 Kinshasa.—4° 20' S., 15° 20' E.  
 Kipaila.—10° 45' S., 28° 35' E.  
 Kirstenbosch.—34° S., 18° 30' E.  
 Kirundu.—1° 15' S., 25° 30' E.  
 Kisantu.—5° 10' S., 15° 10' E.  
 Kisumu.—0° 5' S., 34° 45' E.  
 \*Kitagueta.—Uganda. Probably misspelling for Kitagwenda.  
 Kitagwenda.—0° 10' N., 30° 45' E.  
 Kitempuka.—5° 25' S., 28° 45' E.  
 Kitobola.—5° 20' S., 14° 40' E.  
 Kitta.—5° 55' N., 0° 55' E.  
 Kitui.—1° 15' S., 38° E.  
 Kivu (L.).—2° S., 29° E.  
 Knysna.—34° S., 23° 5' E.  
 Koloka, near Angu.—3° 5' N., 24° 35' E.  
 Konakry.—9° 25' N., 13° 45' W.  
 Kondué.—4° 55' S., 23° 15' E.  
 Kooa.—24° 50' S., 24° 25' E.  
 Kor Attar.—9° 55' to 10° 25' N., 32° 15' to 34° E.  
 Kordofan.—12° 25' N., 31° 15' E.  
 Kor Gasch.—15° 5' to 17° N., 35° to 36° 25' E.  
 \*Kor Guillo.—Homran, Anglo-Egyptian Sudan.  
 Kor Langhebb.—17° 25' N., 37° E.  
 Kor Lebka.—16° 5' to 16° 20' N., 38° 30' to 39° 15' E.  
 Korogwe.—5° 10' S., 38° 30' E.  
 \*Kortright Hill.—Sierra Leone.  
 Kotonou.—6° 20' N., 2° 25' E.  
 Kouandé.—10° 20' N., 1° 45' E.  
 Kounhi.—9° 15' N., 41° 5' E.  
 Krebedje.—5° 55' N., 19° E.  
 Kribi.—3° N., 10° E.  
 Kroonstad.—27° 40' S., 27° 20' E.  
 Kubub.—26° 45' S., 16° 15' E.  
 Kuilu (R.).—3° 30' to 4° 30' S., 11° 45' to 12° 30' E.  
 Kulumuzi (R.).—5° 5' S., 38° 50' to 39° 5' E.  
 Kunga, near Malela.—5° 55' S., 12° 35' E.  
 Kwamouth.—3° 20' S., 16° 10' E.  
 Kwango (R.).—3° to 10° S., 17° to 19° E.  
 Kwesi.—1° 5' N., 30° E.  
 Kwidjwi (I.), Lake Kivu.—2° 10' S., 29° 20' E.  
 \*Kyaka Fort.—On Kagera R., German East Africa.  
 Ladismith.—33° 30' S., 21° 20' E.  
 Lado.—5° 5' N., 31° 45' E.  
 Ladysmith.—28° 30' S., 29° 45' E.  
 Laffarugh.—10° 5' N., 44° 50' E.  
 Lagos.—6° 30' N., 3° 25' E.  
 Lambarene.—0° 40' S., 10° 15' E.  
 Lamu (I.).—2° 15' S., 40° 55' E.  
 Landana.—5° 15' S., 12° 15' E.  
 Landjoro.—3° 25' S., 37° 50' E.  
 Langenburg.—9° 35' S., 34° 10' E.  
 \*Las Ej.—Somaliland.  
 \*Leboi.—Abyssinia.  
 Lehututu.—23° 55' S., 21° 55' E.  
 Leitokitok.—2° 55' S., 37° 45' E.  
 Lemba (R.), Mayombe.—5° 20' to 5° 40' S., 12° 30' to 12° 45' E.  
 Leopold II (L.).—2° S., 18° 15' E.  
 Leopoldville.—4° 25' S., 15° 20' E.  
 Leribe.—28° 45' S., 28° 15' E.  
 Lesse.—0° 40' N., 29° 40' E.  
 Lessouto, see Basutoland.  
 Letlake.—23° 40' S., 22° 20' E.  
 Let Marefia.—9° 45' N., 40° E.  
 Lettema (Mt.).—3° 40' S., 37° 20' E.  
 \*Lewa Mambaa.—German East Africa.  
 Libenge.—3° 35' N., 18° 30' E.  
 Libreville.—0° 25' N., 9° 25' E.  
 Lie.—2° N., 21° 20' E.  
 Lifungula, Uele.—3° 45' N., 27° 20' E.  
 Likimi.—2° 40' N., 20° 40' E.  
 Likoni.—4° 5' S., 39° 40' E.  
 Limba.—9° 25' N., 12° W.  
 Lindi.—10° S., 39° 45' E.  
 Lindi (R.).—1° 25' N., to 0° 25' S., 25° 5' to 29° E.  
 Lingunda.—1° N., 20° 40' E.  
 \*Linkanda.—Kasai, Belgian Congo.  
 Lisala.—2° 10' N., 21° 30' E.

- Lisasa.—0° 15' N., 29° 30' E.  
 Livingstone.—18° S., 25° 45' E.  
 Loango.—4° 35' S., 11° 45' E.  
 Loangwa (R.).—11° to 16° S., 30° to 33° E.  
 Lobatsi.—25° 10' S., 25° 40' E.  
 Lobay (R.).—4° 15' S., 18° E.  
 \*Lobombo Borges.—Portuguese East Africa.  
 Lokelenge.—1° 20' N., 22° 45' E.  
 Lokundje (R.).—3° 5' to 3° 25' N., 10° to 11° 15' E.  
 Lolodorf.—3° 15' N., 10° 40' E.  
 Lomami (R.).—0° 45' N. to 8° 45' S., 24° to 26° E.  
 Lomie.—3° 10' N., 13° 40' E.  
 Lonely Mine.—19° 25' S., 29° 25' E.  
 \*Longa.—Senegambia. Probably misspelling for Louga.  
 Longji.—3° 5' N., 10° E.  
 Longonot Crater.—0° 55' S., 36° 25' E.  
 Lonkala.—4° 40' S., 23° 10' E.  
 Los (Is.).—9° 30' N., 13° 50' E.  
 Louga.—15° 35' N., 16° 25' W.  
 Lovoi (R.).—8° 10' S., 26° 20' E.  
 Luali.—5° S., 12° 25' E.  
 Luapula (R.).—9° to 12° S., 29° E.  
 Lubi (R.).—5° to 6° 40' S., 23° 20' E.  
 Lubila.—1° N., 27° 10' E.  
 Lubumbashi (R.).—11° 45' S., 27° 40' E.  
 Lubutu.—0° 40' S., 26° 40' E.  
 Lüderitz Bay.—26° 40' S., 15° 10' E.; same as Angra Pequena.  
 Lugh.—3° 50' N., 42° 35' E.  
 \*Lugny.—French Congo.  
 Lugombe.—5° 40' S., 28° 50' E.  
 Lukaya (R.).—4° 30' S., 15° 20' E.  
 Luki.—5° 35' S., 13° 10' E.  
 Lukolela.—1° 10' S., 17° 10' E.  
 Lukonzolwa.—8° 50' S., 28° 40' E.  
 Lukuga (R.).—6° S., 27° to 29° E.  
 Lukula.—5° 25' S., 13° E.  
 Lukungu (R.).—5° to 5° 30' S., 14° 15' to 14° 45' E.  
 \*Lumaliza.—Belgian Congo.  
 \*Lumbulumbu.—Belgian Congo.  
 Lumbwa.—0° 40' S., 35° 20' E.  
 Lungube.—Katanga. Probably misspelling for Lugombe.  
 Lusambo.—4° 55' S., 23° 15' E.  
 Lusinga (I.), see Rusinga (I.).  
 Lydenburg.—25° 5' S., 30° 25' E.  
 Maddo Wells.—3° 55' N., 41° E.  
 Madibi.—4° 25' S., 18° 35' E.  
 Madingu.—4° 10' S., 13° 30' E.  
 \*Madona.—Nyamyas, Nyasaland.  
 Mafeking.—25° 50' S., 25° 40' E.  
 Mafia (I.).—7° 45' S., 39° 30' E.  
 \*Mafungu.—Belgian Congo.  
 Magalapye.—23° 5' S., 26° 55' E.  
 Magala Re Umberto.—4° 45' N., 41° 25' E.  
 \*Magnarra (R.). — Portuguese East Africa.  
 Maji-ya-chumvi.—3° 50' S., 39° 25' E.  
 \*Majuba. — Herschel District, Cape Colony.  
 \*Majuba Neck.—Cape Colony.  
 \*Majunga.—Belgian Congo.  
 Makalla.—14° 30' N., 49° 10' E.  
 Makalle.—13° 30' N., 39° 25' E.  
 Makanga.—3° 40' S., 25° 50' E.  
 Makapan.—25° 15' S., 28° 5' E.  
 Makdischu.—2° N., 45° 30' E.  
 Malange.—9° 35' S., 16° 25' E.  
 Malela.—6° S., 12° 40' E.  
 Malema.—2° N., 21° 30' E.  
 Malende.—4° 35' N., 9° 30' E.  
 \*Malindi.—German East Africa.  
 Malindi (Southern Rhodesia).—19° S., 27° 10' E.  
 \*Malome.—On the Okiavo R., Belgian Congo.  
 Malvern.—29° 50' S., 31° E.  
 Mamou.—10° 20' N., 12° 15' W.  
 Manamama.—2° N., 28° E.  
 Manda (I.).—2° 20' S., 40° 55' E.  
 Mandimbo.—0° 55' S., 27° 20' E.  
 \*Mandouga.—French Congo.  
 Mandungu.—2° 30' N., 23° 15' E.  
 Mangapwani.—6° S., 39° 10' E.  
 Mangbetu Country, see Niangara.  
 Mange.—4° S., 19° 30' E.



- \*Maniou.—French Guinea. Probably Mamou.  
 Manow.—9° 15' S., 33° 45' E.  
 Marangu.—3° 20' S., 37° 30' E.  
 Masai Steppe.—1° S., 35° E.  
 Masaki.—1° 5' S., 28° 10' E.  
 Mascat.—23° 20' N., 58° 40' E.  
 Maseru.—29° 20' S., 27° 25' E.  
 Masisi.—1° S., 28° 30' E.  
 Masongo.—1° S., 27° 35' E.  
 Massaua.—15° 40' N., 39° 25' E.  
 Matadi.—5° 50' S., 13° 35' E.  
 Matagoi.—2° 30' N., 43° 25' E.  
 \*Matchacha.—Between Ponthierville and Nyangwe, Belgian Congo.  
 Matetsi.—18° 15' S., 26° 5' E.  
 Matjesfontein.—33° 15' S., 20° 35' E.  
 Matoppo Hills.—20° 45' S., 28° 50' E.  
 Matroosberg.—33° 20' S., 19° 40' E.  
 Mau Escarpment.—0° to 1° S., 35° 30' to 36° 20' E.  
 \*Maveli (Mts.).—Near the Munda R., French Congo.  
 Mawambi.—1° 10' N., 28° 45' E.  
 \*Mayabal.—Eritrea.  
 Mayombe.—5° S., 13° E.  
 M'Bale.—1° 5' N., 34° 10' E.  
 Mbalmajo.—3° 30' N., 11° 35' E.  
 Mbamu.—4° 15' S., 14° 45' E.  
 Mbaramu.—4° 25' S., 38° 20' E.  
 \*M'Bounion.—French Congo.  
 Mbusini.—6° 15' S., 38° E.  
 Mbuyuni.—3° 30' S., 37° 55' E.  
 Medje.—2° 25' N., 27° 30' E.  
 \*Melelia.—Eritrea.  
 Merca.—1° 45' N., 44° 55' E.  
 Meru (Mt.).—3° 15' S., 36° 45' E.  
 Metemma.—16° 45' N., 33° 20' E.  
 Metit.—3° 45' N., 11° 35' E.  
 \*Mfongosi.—Zululand.  
 Mful Aja.—Near Metit, Cameroon.  
 \*Mgaturo.—On Kwidjwi Island.  
 Mhonda.—6° 5' S., 37° 35' E.  
 Milmil.—8° 20' N., 43° 50' E.  
 \*Mindouga.—French Congo.  
 Mindouli.—4° 15' S., 14° 15' E.  
 Misahöhe.—6° 55' N., 0° 35' E.  
 Mitiana.—0° 25' N., 32° 5' E.  
 \*Mkosi.—Zululand.  
 Mobuku (R.).—0° 20' N., 30° 15' E.  
 Mobwasa.—2° 40' N., 23° 5' E.  
 Moera.—0° 35' N., 29° 30' E.  
 Moero (L.).—9° S., 29° E.  
 Mohasi (L.).—1° 50' S., 30° 20' E.  
 \*Mokbe.—Near Dume, Cameroon.  
 \*Mokundange.—Cameroon.  
 Moliwe.—4° 5' N., 9° 15' E.  
 Molo.—0° 15' S., 35° 45' E.  
 Molundu.—2° 5' N., 15° 15' E.  
 Mombasa.—4° S., 39° 50' E.  
 Mombo.—4° 55' S., 38° 15' E.  
 Mondombe.—0° 35' S., 22° 30' E.  
 \*Mondu (R.).—Southern Rhodesia.  
 Monga.—Near Amani, German East Africa.  
 Mongalla.—5° 10' N., 31° 45' E.  
 Mongumba.—3° 35' N., 18° 30' E.  
 Monrovia.—6° 30' N., 10° 50' W.  
 Montagu Pass.—33° 45' S., 22° 30' E.  
 \*Moor Plantation. — Near Ibadan, Nigeria.  
 Morogoro.—6° 50' S., 37° 50' E.  
 \*Morumballe (Mts.). — Zambesi R., Portuguese East Africa.  
 Moschi.—3° 20' S., 37° 25' E.  
 Mosekowa.—0° 45' S., 26° 55' E.  
 Mossamedes.—15° 15' S., 12° 15' E.  
 \*Motombe.—Okiavo R., Belgian Congo.  
 \*Mountain Rise.—Near Pietermaritzburg, Natal.  
 \*Mowange.—Cameroon.  
 Mozambique (I.).—15° S., 40° 40' E.  
 \*M'Piaka.—French Congo.  
 M'Pila.—4° 10' S., 15° 20' E.  
 Mpongwe District.—0° 15' N., 9° 20' E. and 0° 40' S., 9° 20' E.  
 Mpororo.—0° 40' to 1° 25' S., 29° 20' to 30° 30' E.  
 Msozi.—0° 55' S., 31° 50' E.  
 \*Mto-ya-Kifaru.—Arusha-chini, German East Africa.  
 Mubende Region.—1° 15' N., 31° 15' E.  
 Mubuku, eastern Ruwenzori Mt., see Mobuku.  
 Muculla.—7° S., 12° 50' E.  
 Muemba.—4° 10' S., 37° 50' E.

- Mukenge.—6° S., 22° 30' E.  
 Mukonje (Farm).—4° 35' N., 9° 30' E.  
 Munda (R.).—0° 25' N., 9° 35' to 10° E.  
 Mundame.—4° 35' N., 9° 35' E.  
 Mungo (R.).—4° to 4° 50' N., 9° 30' E.  
 Munza.—3° 20' N., 28° E.  
 Mussengue, see Sobato.  
 Mwataate.—3° 30' S., 38° 20' E.  
 Mwengwa.—13° S., 27° 40' E.  
 Mwera (R.), Zanzibar.—6° 10' S., 39° 15' E.  
  
 Nabambisso (R.).—4° 45' N., 28° 40' E.  
 \*Nabena.—Liberia.  
 Nahoon (R.).—32° 55' S., 27° 50' E.  
 Nairobi.—1° 5' S., 36° 50' E.  
 Naivasha.—0° 40' S., 36° 35' E.  
 Nakitawa.—0° 25' N., 30° E.  
 Nakuru.—0° 15' S., 36° 10' E.  
 Nala.—2° 50' N., 27° 50' E.  
 Namaland, Little.—28° 45' to 30° 15' S., 16° 45' to 19° E.  
 Nanga (Mts.).—4° 5' N., 13° 5' E.  
 Nana (R.).—6° 35' N., 19° E.  
 Naremurru (R.).—0° 10' S., 37° 15' E.  
 Natron Lakes, foot of Mt. Kilimanjaro.—3° 10' S., 36° 55' E.  
 N'daika.—0° 10' S., 37° 10' E.  
 Ndara.—3° 30' S., 38° 30' E.  
 Ndjoro.—0° 20' S., 36° E.  
 \*N'Douna.—French Congo.  
 Nduye.—1° 20' N., 28° 30' E.  
 Nefasit.—15° 25' N., 39° E.  
 Newcastle.—27° 45' S., 29° 50' E.  
 New Hanover.—29° 20' S., 30° 35' E.  
 New Moschi.—3° 20' S., 37° 20' E.  
 Ngamba (I.).—0° 5' S., 32° 40' E.  
 Ngami (L.).—20° 50' S., 23° E.  
 Ngare-na-Nyuki (R.), Mt. Meru.—3° to 3° 15' S., 36° 55' E.  
 Ngare Nyuki (R.), Mt. Kenia.—0° 30' N. to 0° 10' S., 37° to 37° 25' E.  
 Ngare Rongai.—2° 50' S., 37° 30' E.  
 Ngayu.—1° 40' N., 27° 40' E.  
 Ngazi.—0° 55' N., 24° 50' E.  
 Nguelo.—5° 5' S., 38° 40' E.  
 Ngumba Country.—3° 15' N., 10° 53' E.  
  
 Niam Niam Country.—4° 30' to 7° N., 27° 30' to 29° 30' E.  
 Niagara.—3° 40' N., 27° 50' E.  
 Niapu.—2° 15' N., 26° 50' E.  
 Niembo, see Pale.  
 Nieuwdorp.—12° 5' S., 27° 50' E.  
 Njussi.—5° 12' S., 38° 35' E.  
 Nkolebunde.—3° 5' N., 10° 35' E.  
 Nkolentanga.—1° 50' N., 10° 50' E.  
 No (L.).—9° 30' N., 30° 35' E.  
 Nord Hook.—34° 5' S., 18° 20' E.  
 Nouvelle Anvers.—1° 40' N., 19° 10' E.  
 Nssanakang.—5° 50' N., 8° 55' E.  
 Nun (R.).—4° 20' N., 6° 5' E.  
 Nyamandhloru.—19° 55' S., 28° 5' E.  
 \*Nyamyas.—Nyasaland.  
 Nyangnori.—0°, 35° E.  
 Nyangwe.—4° 15' S., 26° 15' E.  
 \*Nyanza (L.).—Katanga, Belgian Congo.  
 Nyere, see Nyeri.  
 Nyeri.—0° 30' S., 37° E.  
 Nyiro (Mt.).—2° 40' N., 36° 25' E.  
  
 Oban.—5° 20' N., 8° 35' E.  
 Obbia.—5° 20' N., 48° 25' E.  
 Obock.—12° N., 43° 15' E.  
 Ogaden.—7° 10' N., 44° 15' E.  
 Ogowe (R.).—1° S., 10° E.  
 Okahandja.—22° S., 16° 55' E.  
 Okiavo (R.), same as Lindi (R.).  
 Old Calabar.—5° N., 8° E.  
 Old Kasongo.—4° 30' S., 26° 35' E.  
 Olokemeji.—7° 25' N., 3° 30' E.  
 \*Olombo.—Belgian Congo.  
 Omaheke.—21° to 21° 30' S., 17° 30' to 20° E.  
 Omdurman.—15° 50' N., 32° 5' E.  
 Ondoa.—2° 55' N., 10° 15' E.  
 Oni Camp.—6° 35' N., 4° 15' E.  
 \*Ontys.—Ex-German Southwest Africa.  
 Oso (R.).—1° S., 27° 20' E.  
 Ossidinge.—5° 45' N., 9° 15' E.  
 Ouossou.—6° 20' N., 4° 55' W.  
  
 \*Paku.—Uele, Belgian Congo.  
 Pale (Niembo).—1° S., 27° 25' E.  
 Panga.—1° 45' N., 26° 15' E.  
 Pangani.—5° 25' S., 39° E.

- Park Rynie.—30° 20' S., 30° 45' E.  
 \*Patalonga.—Near Yambuya, Belgian Congo.  
 Patta (I.).—2° 5' S., 41° 5' E.  
 Pawa.—2° 25' N., 27° 50' E.  
 Pemba (I.).—4° 50' to 5° 30' S., 39° 40' to 39° 50' E.  
 Penge.—1° 25' N., 28° 15' E.  
 Pietermaritzburg.—29° 35' S., 30° 25' E.  
 Pinetown.—29° 45' S., 30° 50' E.  
 Pirie Forest.—32° 45' S., 27° 15' E.  
 Plumtree.—20° 30' S., 27° 35' E.  
 Poko.—3° 10' N., 26° 50' E.  
 Ponthierville.—0° 25' S., 25° 30' E.  
 Popokabaka.—5° 40' S., 17° E.  
 Pori.—3° 35' S., 38° 10' E.  
 Port Alfred.—33° 35' S., 26° 55' E.  
 Port Elizabeth.—34° S., 25° 35' E.  
 Port Florence.—0° 5' S., 34° 45' E.  
 Port Natal, see Durban.  
 Port Nolloth.—29° 15' S., 16° 55' E.  
 Port Sudan.—19° 35' N., 37° 5' E.  
 Possession (I.).—27° S., 15° 10' E.  
 Pretoria.—25° 40' S., 28° 15' E.  
 Prince of Wales Bay.—27° 5' S., 15° 15' E.  
 Pungwe Valley.—18° 45' to 19° 50' S., 33° to 34° 55' E.  
 \*Quibanga.—Golungo Alto, Portuguese West Africa.  
 Quifangondo.—8° 45' S., 13° 20' E.  
 Quilimane.—17° 45' S., 37° E.  
 Ramisi (R.).—4° 20' to 4° 30' S., 39° 5' to 39° 25' E.  
 Ras Doumeira.—12° 40' N., 43° 5' E.  
 Ras Fartak.—15° 50' N., 52° 30' E.  
 Ras Shoab.—12° 35' N., 54° E.  
 Rau (R.).—3° 10' to 3° 35' S., 37° 20' to 37° 25' E.  
 \*Redbank.—Rhodesia.  
 Reddersburg.—29° 35' S., 26° 10' E.  
 Redjaf.—4° 45' N., 31° 35' E.  
 Rendile.—2° 20' N., 38° E.  
 Renk.—11° 45' N., 32° 45' E.  
 Revoue (R.).—18° 50' to 19° 50' S., 32° 40' to 33° 50' E.  
 Richmond.—29° 50' S., 30° 15' E.  
 Rikatla.—25° 45' S., 32° 35' E.  
 Rio Muni.—1° 40' N., 10° E.  
 Risimu.—1° N., 26° 45' E.  
 Romée.—0° 35' N., 24° 50' E.  
 Rooibank.—23° 10' S., 14° 40' E.  
 Rosako.—6° 25' S., 38° 40' E.  
 Ruanda.—2° S., 29° 50' E.  
 Rudolf (L.).—2° 20' to 5° N., 36° E.  
 Rungu.—3° N., 28° E.  
 Rurunga.—0° 40' S., 37° 5' E.  
 Rusinga (I.).—0° 25' S., 34° 10' E.  
 Rutshuru.—1° 15' S., 29° 30' E.  
 Ruwenzori (Mt.).—0° 30' N., 29° 50' E.  
 Saati.—15° 35' N., 39° 15' E.  
 Sabderat.—15° 30' N., 36° 40' E.  
 Sabuka.—4° 30' S., 15° 10' E.  
 Sachsenwald, see Daressalaam.  
 Saganeiti.—15° 5' N., 39° 10' E.  
 St. Gabriel, near Stanleyville.  
 Saint Louis.—16° N., 16° 35' W.  
 St. Paul de Loanda.—8° 55' S., 13° 10' E.  
 Saldanha Bay.—33° S., 18° E.  
 Salem.—22° 40' S., 15° 25' E.  
 Salisbury.—17° 45' S., 31° E.  
 \*Salmoreto.—Somaliland.  
 Salole.—4° 15' N., 39° 25' E.  
 Samburu.—3° 40' S., 38° 55' E.  
 Same.—4° 5' S., 37° 45' E.  
 Samkita.—0° 25' S., 10° 25' E.  
 \*Samlia Falls.—On the N'Gamie R., Sierra Leone?  
 Sampwe.—9° 30' S., 27° 25' E.  
 San Antonio.—6° 10' S., 12° 20' E.  
 Sancurar.—4° N., 40° E.  
 Sanda, Lower Congo.—4° 35' S., 15° 35' E.  
 \*Sanda.—Uganda.  
 Sankisia.—9° 30' S., 25° 55' E.  
 Sankuru (R.).—4° to 10° S., 21° to 22° E.  
 San Pedro.—4° 45' N., 6° 40' W.  
 Santa Isabel.—3° 45' N., 8° 45' E.  
 San Thomé (I.).—0° 20' N., 6° 43' E.  
 \*Sawmills.—Umgusa R., Southern Rhodesia.

- Schoa.—10° N., 39° 30' E.  
 Sciotel.—15° 35' N., 38° 20' E.  
 Sebakwe.—19° 10' S., 30° E.  
 Sekgoma.—24° 30' S., 23° 50' E.  
 Sele (R.).—4° 20' to 5° 40' S., 15° 35' to 15° 55' E.  
 Semliki (R.).—0° to 1° N., 29° 30' to 30° E.  
 \*Senge (Mts.).—Cameroon.  
 Sennar.—13° 30' N., 33° 35' E.  
 Serengeti, British East Africa.—3° 15' S., 38° 10' E.  
 Serui (R.).—22° 20' S., 26° 45' to 28° E.  
 Sette-Cama.—2° 30' S., 9° 45' E.  
 Settit (R.).—14° 20' N., 35° 50' to 37° 20' E.  
 Severelela.—24° 55' S., 24° 55' E.  
 \*Shanks Station.—Cape Colony.  
 Sherbro (I.).—7° 25' N., 12° 45' W.  
 Shiloango (R.).—5° S., 12° to 13° E.  
 Shiloh.—19° 45' S., 28° 40' E.  
 Shilouvane.—24° 10' S., 30° 15' E.  
 Shimoni.—4° 35' S., 39° 15' E.  
 Shinsenda.—12° 25' S., 28° E.  
 \*Shivyre.—Natal.  
 Shoshong Road Station.—23° 35' S., 26° 35' E.  
 Sibange, Maveli Mts., near the Munda R.—0° 25' N., 9° 35' E.  
 Sibayi (L.).—27° 20' S., 32° 45' E.  
 Sikasso.—11° 15' N., 5° 35' W.  
 Simon's Town.—34° 10' S., 18° 25' E.  
 Sinadogo.—5° 30' N., 46° 10' E.  
 Sinai Peninsula.—28° to 30° N., 32° 30' to 35° E.  
 \*Sipapoma.—On the Umgusa R., Southern Rhodesia.  
 Sir Lowry Pass.—34° 10' S., 18° 55' E.  
 Sitaweza.—1° S., 27° 20' E.  
 Smithwinkle Bay.—34° 15' S., 18° 25' E.  
 \*Sobato de Mussengue.—Golungo Alto, Portuguese West Africa.  
 Sogodas.—14° 55' N., 36° 50' E.  
 Sokode Basan.—9° N., 1° 10' E.  
 Somabula.—19° 35' S., 30° 40' E.  
 Songalong.—6° 25' N., 11° 15' E.  
 Soppo.—4° 10' N., 9° 15' E.  
 \*Springvale.—Rhodesia.  
 \*Stamford Hill.—Near Durban, Natal.  
 Stanleyville.—0° 30' N., 25° 15' E.  
 \*Steekstown.—Cape Colony.  
 Steinkopf.—29° 15' S., 17° 45' E.  
 \*Stella Bush.—Durban, Natal.  
 Stellenbosch.—33° 55' S., 18° 50' E.  
 Stephanie (L.).—4° 40' N., 36° 50' E.  
 Steynsburg.—31° 20' S., 25° 50' E.  
 Stormberg Junction.—31° 20' S., 26° 20' E.  
 Stormsvlei.—34° 5' S., 20° 5' E.  
 Suakin.—19° 10' N., 37° 22' E.  
 Sunday River Mts., near Port Elizabeth.—33° 40' S., 25° 45' E.  
 \*Sweetwaters.—Near Pietermaritzburg, Natal.  
 Swellendam.—34° 5' S., 20° 30' E.  
 \*Sydenham.—Durban, Natal.  
 Table (Mt.).—34° S., 18° 25' E.  
 Tabora.—5° 10' S., 32° 50' E.  
 Talavanje.—5° 40' S., 12° 35' E.  
 \*Tanda.—Usambara, German East Africa.  
 Tanga.—5° 5' S., 39° 5' E.  
 Tanganyika (L.).—3° to 9° S., 29° to 31° E.  
 Taufikia.—9° 25' N., 31° 45' E.  
 Taveta.—3° 25' S., 37° 45' E.  
 Tchafianani.—8° 40' N., 40° 25' E.  
 Tchercher (L.).—8° 50' N., 40° 35' E.  
 Techeckna.—11° 25' N., 16° 10' E.  
 Teneriffe.—28° 35' to 28° 5' N., 23° 20' to 24° 20' E.  
 \*Terwidja.—Northeast Africa.  
 Tes.—13° 35' N., 44° E.  
 Tete, Belgian Congo.—1° 20' N., 28° 50' E.  
 Tete, Portuguese East Africa.—16° 10' S., 33° 30' E.  
 The Bluff, Durban.—29° 55' S., 31° 5' E.  
 Thiès.—14° 45' N., 16° 15' W.  
 Thopane.—24° 45' S., 24° 15' E.  
 Thysville.—5° 30' S., 15° E.  
 Tibati.—6° 35' N., 12° 35' E.  
 Tiko.—4° 5' N., 9° 25' E.  
 Tiwi.—4° 5' S., 39° 35' E.

- Toro, same as Fort Portal.
- \*Toukola.—Sudan.
- Toulo.—9° 20' N., 41° 10' E.
- Tsana (L.).—12° N., 37° 40' E.
- Tsavo.—3° S., 38° 25' E.
- \*Tsessebe Station.—Rhodesia.
- Tshoa.—5° 35' S., 12° 45' E.
- Tshopo (R.).—0° 55' N. to 0° 5' S., 25° 5' to 28° E.
- Tua.—3° 30' S., 16° 40' E.
- Tulbagh.—33° 20' S., 19° E.
- Tumba.—5° 25' S., 14° 35' E.
- Ubangi (R.).—0° to 5° N., 18° to 23° E.
- Uchibango.—0° 40' S., 26° 20' E.
- Uebi, see Webi.
- Uele (R.).—3° 30' N., 23° to 30° E.
- Uelleburg.—1° 45' N., 10° 35' E.
- Ufumbiro (Mts.).—1° 15' S., 29° 30' E.
- \*Ugono (Mt.).—German East Africa.
- Uitenhage.—33° 45' S., 25° 25' E.
- Ulenge (I.).—5° 1' S., 39° 10' E.
- Uluguru (Mts.).—7° 5' S., 37° 40' E.
- Umangi.—2° 10' N., 21° 25' E.
- \*Umbilo.—Near Durban, Natal.
- Umfolosi.—28° 25' S., 32° 15' E.
- Umgeni (R.).—29° 25' to 29° 50' S., 29° 50' to 31° E.
- Umgusa (R.).—19° 25' to 20° 5' S., 27° 35' to 28° 25' E.
- Unyoro Province.—1° 50' N., 31° 35' E.
- \*Uomber.—Abyssinia.
- Uorandi.—5° 45' N., 47° 15' E.
- Usambara.—5° 50' S., 38° 40' E.
- \*Usegua.—6° S., 38° E.
- \*Uzaga.—Region of the Great Lakes, Belgian Congo.
- Valdezia.—23° 10' S., 30° 15' E.
- Vankerckhovenville.—3° 20' N., 29° 20' E.
- Van Reenen Pass.—28° 25' S., 29° 30' E.
- Verulam.—29° 35' S., 31° E.
- Victoria.—4° N., 9° 15' E.
- Victoria Falls.—18° S., 25° 50' E.
- Vivi.—5° 45' S., 13° 35' E.
- Voi.—3° 30' S., 38° 30' E.
- Vrijburg.—26° 55' S., 24° 35' E.
- Waboniland.—2° 10' S., 40° 50' E.
- Wadi Halfa.—21° 55' N., 31° 25' E.
- Waki (R.).—1° 30' to 1° 50' N., 31° 25' E.
- Walfish Bay.—22° 55' S., 14° 30' E.
- Walikale.—1° 25' S., 28° E.
- Wambugu.—0° 40' S., 37° 5' E.
- Wanga.—4° 40' S., 39° 15' E.
- Wari, Forcados R.—5° 30' N., 5° 45' E.
- Waterval Onder.—25° 40' S., 30° 25' E.
- \*Watikaia.—Belgian Congo.
- Webi (R.).—4° 10' to 7° 15' N., 39° 35' to 42° E.
- Weenen District.—28° 50' S., 30° 5' E.
- Welgelegen, Katanga.—12° S., 27° 45' E.
- Weranjanje.—1° 40' S., 31° E.
- \*Wessels Neck.—Natal.
- \*Willbrook.—Near Ladysmith, Natal.
- Willowmore.—33° 20' S., 23° 30' E.
- Windhoek.—22° 35' S., 17° 10' E.
- Winnebah.—5° 25' N., 0° 40' W.
- Wombali.—3° 20' S., 17° 10' E.
- \*Xalosi.—Portuguese East Africa.
- \*Xoce (R.).—Southern Rhodesia.
- Yabena Mabote.—1° 15' S., 24° 40' E.
- Yakuluku.—4° 20' N., 28° 50' E.
- Yakusu.—0° 35' N., 25° E.
- \*Yalutcha.—Belgian Congo.
- Yambata.—2° 20' N., 22° 5' E.
- Yaminga.—2° 5' N., 22° 35' E.
- Yambuya.—1° 20' N., 24° 50' E.
- Yandumba.—0° 55' N., 23° 20' E.
- Yanga.—5° 15' S., 13° 40' E.
- \*Yangandi.—Belgian Congo.
- Yanonge.—0° 40' N., 24° 30' E.
- Yaunde.—3° 50' N., 11° 35' E.
- Yukaduma.—3° 25' N., 15° E.
- Yumbi.—1° 50' S., 16° 40' E.
- Zambesi (R.).—11° 5' to 18° 45' S., 22° 35' to 36° 15' E.
- Zambi.—6° S., 12° 50' E.
- Zanzibar (I.).—6° S., 39° 30' E.
- Zomba.—15° 20' S., 35° 20' E.
- Zoutpansberg.—23° 20' S., 30° 30' E.
- Zyoual (Mt.).—8° 35' N., 38° 55' E.

**FORMICIDÆ****DORYLINÆ** Leach**Dorylini** Forel**Dorylus** FABRICIUS

*Dorylus* FABRICIUS, 1793, 'Ent. Syst.,' II, p. 365. SHUCKARD, 1840, Ann. Nat. Hist., V, p. 268. EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, p. 697; 1910, 'Gen. Insect., Dorylinæ,' p. 5.

*Typhlopone* WESTWOOD, 1840, 'Introduct. Class. Insects,' II, p. 219. SHUCKARD, 1840, Ann. Nat. Hist., V, p. 262. F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 110.

*Dichthadia* GERSTÆCKER, 1863, Stettin. Ent. Zeitg., XXIV, p. 85.

*Alaopone* EMERY, 1881, Ann. Mus. Civ. Genova, XVI, p. 274.

*Vespa* LINNÆUS. *Mutilla* LINNÆUS, LAMARCK.

Genotype: *Vespa helwola* Linnæus, 1764.

**Subgenus 1. *Dorylus* FABRICIUS, sensu stricto**

*Dorylus* subg. *Dorylus* EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 701 and 714; 1910, 'Gen. Insect., Dorylinæ,' p. 9.

Subgenotype: same as genotype.

1. *Dorylus affinis* SHUCKARD, 1840, Ann. Nat. Hist., V, p. 316 (♂). WESTWOOD, 1842, 'Arcana Ent.,' I, p. 79 (♂). F. SMITH, 1859, 'Cat. Hym. Brit. Mus.,' VII, p. 2, Pl. I, fig. 6. ROGER, 1863, 'Verzeich. Formicid.,' p. 41. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 408. GERSTÆCKER, 1871, Arch. f. Naturg., XXXVII, 1, p. 355; 1873, in 'v. d. Decken's Reisen in Ost Afrika, Gliederthiere,' p. 357 (♂). EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 110 (♂). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 9. MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 200 (♂). ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 5 (♂). EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 708 and 719, figs. H, J. (♂); 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 596, fig. (♂). H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 42. EMERY, 1899, Ann. Mus. Civ. Genova, XXXIX, p. 499 (♂); 1901, Mem. Accad. Sc. Bologna, (5) IX, pp. 416, 417, 421, 428, and 429 (♀, larva, pupa), Pl. I, figs. 1-8, 10-11; Pl. II, figs. 1-9. FOREL, 1901, Mitt. Naturh. Mus. Hamburg, XVIII, p. 47 (♂). MAYR, 1907, Sitzb. Ak. Wiss. Wien, math. naturw. Kl., CXVI, Abt. I, p. 387; 1907, in Sjöstedt, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 8 (♂). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, p. 352 (1909), (♂). FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 53. ZAVATTARI, 1909, 'Il Ruwenzori, Parte Scientif.,' I, p. 212 (♂). SANTSCHI, 1910, Rev. Suisse Zool., XVIII, pp. 737 and 744, fig. 1d (♂). EMERY, 1910, 'Gen. Insect., Dorylinæ,' p. 9 (♂, ♀). FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 362 (♀). STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08),' III, p. 375 (♂). FOREL, 1911, Rev. Zool. Afr., I, p. 274 (♀, ♂). SILVESTRI, 1913, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 145; 'Report Exped. to Africa in Search Nat. Enem. Fruit Flies,' 1914, p. 128. SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 58 (♀, ♂); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 332 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 120 (♀, ♂), Pl. IV, fig. 35. SANTSCHI, 1917, Bull. Soc. Hist. Nat. Afr. Nord, VIII, p. 18 (♂).

*Dorylus planiceps* HALDEMAN, 1849, Proc. Acad. Nat. Sci. Philadelphia, IV, p. 204 (♂).

*Typhlopone oraniensis* var. *brevinodosa* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 737 (♀); 1863, *ibid.*, XIII, p. 457.

*Typhlopone brevinodosa* ROGER, 1863, 'Verzeich. Formicid.,' p. 20.

*Dorylus brevinodosus* EMERY, 1887, Bull. Soc. Ent. Italiana, XIX, p. 349. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 10. ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 5 (♀). EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, p. 707 and 717, figs. F1-8 (♀); 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 596 (♀). ZAVATTARI, 1907, Boll. Mus. Zool. Anat. Comp. Torino, XXII, No. 550, p. 2 (♀).

Type locality: Gambia River, GAMBIA.

SENEGAMBIA: Dakar (F. Silvestri). PORTUGUESE GUINEA: Bambaya (Lucas). FRENCH GUINEA: Konakry; Camayenne (F. Silvestri). LIBERIA: Cape Palmas (Savage). GOLD COAST: Kitta; Akra (H. Brauns). CAMEROON: (Conradt). FERNANDO PO: (Conradt). FRENCH CONGO: Gaboon (Dinklage); Ogowé (Mocquerys); Brazzaville (A. Weiss); southern Darbanda, Krebedje; Cape Lopez. BELGIAN CONGO: Leopoldville (de Pauw); Kitobola (Rovere). PORTUGUESE CONGO: Landana. NORTHERN RHODESIA: Kazungula (Jallá). GERMAN EAST AFRICA: Amani (H. Prell); Kibonoto, Kilimanjaro (Sjöstedt); Lake Galago in northern Ruanda (Schubotz). ZANZIBAR: (Stuhlmann). BRITISH EAST AFRICA: Mombasa (v. d. Decken; C. Alluaud); Kavirondo Bay, Victoria Nyanza; Mau Escarpment between El Burgon and Ndjoro, 2100 m. (Alluaud and Jeannel). UGANDA: Unyoro Province near Hoima; east of Lake Albert; M'Bale (C. Alluaud); Ibanda; Kaibo (Duke of Abruzzi); Gondokoro (F. Werner). SOMALILAND: Errer-es-Saghir (Bricchetti-Robecchi). ABYSSINIA: Budito to Dimé (V. Bottego); Webi; Magala Re Umberto; Ogaden; Ganale (Ruspoli); ANGLO-EGYPTIAN SUDAN: Kor Attar south of Fashoda (F. Werner); Blue Nile (C. Alluaud).

1. Var. *ægyptiacus* (MAYR) EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 708 and 720 (♂); 1896, Ann. Mus. Civ. Genova, XXXVII, p. 153 (♂); 1897, *ibid.*, XXXVIII, p. 596, fig. (♂). MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicid.,' p. 1 (♂). SANTSCHI, 1910, Rev. Suisse Zool., XVIII, p. 744 (♂). EMERY, 1910, 'Gen. Insect., Dorylinæ,' p. 10 (♂). FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 248 (♀, ♂). KARAWAIEW, 1911, Rev. Russe Ent., XI, p. 3 (♂). EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, pp. 3 and 5 (♀, ♂). WASMANN, 1916, Ent. Mitt. Deutsch. Ent. Mus. Berlin, V, p. 109; 1917, Zeitschr. Wiss. Zool., CXVII, p. 309.

*Dorylus ægyptiacus* MAYR, 1865, 'Reise Novara, Zool.,' II, Formicidæ, p. 76, footnote (♂). ERN. ANDRÉ, 1882, 'Spec. Hym. Europ. Algérie,' II, p. 255 (♂). MAGRETTI, 1884, Bull. Soc. Ent. Italiana, XV, (1883), p. 244 (♂); 1884, Ann. Mus. Civ. Genova, XXI, p. 538 (♂). EMERY, 1892, Ann. Soc. Ent. France, XLI, Bull., p. liv.

*Dorylus affinis* subsp. *ægyptiacus* SANTSCHI, 1917, Bull. Soc. Hist. Nat. Afr. Nord, VIII, p. 19 (♂).

*Dorylus affinis* var. *abyssinicus* EMERY, 1901, Mem. Accad. Sc. Bologna, (5) IX, p. 424 (♀), Pl. I, fig. 9; 1910, 'Gen. Insect., Dorylinæ,' p. 10 (♀).

*Typhlopone brevinodosa* EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 381, fig. (♀); 1881, *ibid.*, XVI, p. 271 (♀).

*Dorylus brevinodosus* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 78.

*Dorylus brevinodosus* var. *abyssinicus* EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, p. 717 (♂).

Type locality: EGYPT.

ERITREA: Nefasit (K. Escherich; F. Silvestri); Keren (Beccari; F. Silvestri); Ghinda (F. Silvestri); Aikota (Magretti). ANGLO-EGYPTIAN SUDAN: Sennar (C. Alluaud); Kawa, White Nile (I. Trägårdh); Khartum (Karawaiew); El Hefera on Settit; Kor Guillo, Homran (Magretti). BRITISH EAST AFRICA: Maddo Wells (V. Bottego). ABYSSINIA: Let Marefia, Schoa (Antinori); Salole (Ruspoli); southern Abyssinia (Ilg).

12. Var. *exilis* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 59 (♂); 1917, Bull. Soc. Hist. Nat. Afr. Nord, VIII, p. 18 (♂).

*Dorylus affinis* subsp. *löwyi* var. *exilis* SANTSCHI, 1910, Rev. Suisse Zool., XVIII, p. 744 (♂).

Type locality: Kibosho, Mt. Kilimanjaro, GERMAN EAST AFRICA (C. Alluaud).

GERMAN EAST AFRICA: New Moschi, 800 m.; Himo River, 1000 m.; Kilema, 1400 m. (Alluaud and Jeannel). BRITISH EAST AFRICA: Nairobi; Rurunga, Kikuyu; Bura, Wa-Taita; Taveta; Mombasa; Ngaré Nyuki, Kenia (Alluaud and Jeannel).

13. Var. *hirsutus* (SANTSCHI).

*Dorylus affinis* subsp. *egyptiacus* var. *hirsuta* SANTSCHI, 1917, Bull. Soc. Hist. Nat. Afr. Nord, VIII, pp. 19 and 20 (♂).

Type locality: ABYSSINIA (Reichensperger).

14. Var. *parapsidalis* SANTSCHI, 1917, Bull. Soc. Hist. Nat. Afr. Nord, VIII, pp. 19 and 20 (♂).

Type locality: Blantyre, NYASALAND (G. Arnold).

15. Var. *pulliceps* SANTSCHI, 1917, Bull. Soc. Hist. Nat. Afr. Nord, VIII, pp. 18 and 19 (♂).

Type locality: IVORY COAST (Lohier).

16. Var. *sudanicus* SANTSCHI, 1917, Bull. Soc. Hist. Nat. Afr. Nord, VIII, pp. 18 and 19 (♂).

Type locality: Fort Sibut, southern Darbanda, FRENCH CONGO (Decorse).

1a. Subsp. *denudatus* SANTSCHI, 1917, Bull. Soc. Hist. Nat. Afr. Nord, VIII, p. 19 (♂).

*Dorylus denudatus* SANTSCHI, 1910, Rev. Suisse Zool., XVIII, pp. 737 and 742, figs. 1a and 4 (♂).

Type locality: Upper Niger (Claveau).

1b. Subsp. *löwyi* FOREL, 1907, Ann. Soc. Ent. Belgique, LI, p. 202 (♂). EMERY, 1910, 'Gen. Insect., Dorylinæ,' p. 10 (♂). SANTSCHI, 1910, Rev. Suisse Zool., XVIII, p. 744 (♂). FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 254 (♂).

*Dorylus affinis* subsp. *löwyi* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 60 (♂).

*Dorylus affinis* subsp. *lowyi* SANTSCHI, 1917, Bull. Soc. Hist. Nat. Afr. Nord, VIII, pp. 19 and 20 (♂).

Type locality: ZANZIBAR (Löwy).

ERITREA. BRITISH EAST AFRICA: Mombasa; Athi Plain (Feringue); Rurunga, Kikuyu; Wambogo; Nairobi, Masai Plain (Alluaud and Jeannel). RHODESIA: Bulawayo (G. Arnold).

2. *Dorylus alluaudi* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 60, fig. 4 (♂).



Type locality: Eastern slopes of Mt. Ruwenzori, 1600 m., UGANDA (C. Alluaud).

3. **Dorylus atratus** F. SMITH, 1859, 'Cat. Hym. Brit. Mus.,' VII, p. 4 (♂), Pl. I, fig. 15. ROGER, 1863, 'Verzeich. Formicid.,' p. 41. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 408. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 10. ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 5 (♂). EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 708 and 722 (♂). W. A. SCHULZ, 1906, 'Spolia Hymenopterologica,' p. 297 (♂). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 127 (♂). EMERY, 1910, 'Gen. Insect., Dorylinæ,' p. 10 (♂). STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 374 (♂). See p. 43.

Type locality: Old Calabar, NIGERIA.

FERNANDO PO: (Conradt); Santa Isabel (Schultze). CAMEROON: Bibundi (Tessmann). FRENCH CONGO: Ogowé (Mocquerys). BELGIAN CONGO: Stanleyville (Lang and Chapin).

4. **Dorylus bequaerti** FOREL, 1913, Rev. Zool. Afr., II, p. 311 (♀). BEQUAERT, *ibid.*, p. 423. See p. 43.

Type locality: Sankisia, BELGIAN CONGO (J. Bequaert).

BELGIAN CONGO: Pasaconde near Zambi (J. Bequaert); Banana (Lang and Chapin).

5. **Dorylus braunsi** EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 707 and 718, fig. G (♀); 1901, Mem. Accad. Sc. Bologna, (5) IX, pp. 416 and 428 (♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 352 (♀). EMERY, 1910, 'Gen. Insect., Dorylinæ,' p. 10 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 120 (♀, ♂).

Type locality: LIBERIA (H. Brauns).

FRENCH CONGO: Mandouga; Mbamu (A. Weiss). RHODESIA: Bulawayo (G. Arnold).

5a. Subsp. **anceps** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 215 (♀).

Type locality: Bulawayo, RHODESIA (G. Arnold).

6. **Dorylus brevipennis** EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 708 and 721, figs. K and L (♂); 1901, Mem. Accad. Sc. Bologna, (5) IX, pp. 424 and 428 (♀), Pl. I, fig. 12. MAYR, 1907, Sitzb. Ak. Wiss. Wien, math. naturw. Kl., CXVI, Abt. I, p. 387. ZAVATTARI, 1907, Boll. Mus. Zool. Anat. Comp. Torino, XXII, No. 550, p. 2 (♂). EMERY, 1910, 'Gen. Insect., Dorylinæ,' p. 10 (♀, ♂). SANTSCHI, 1910, Rev. Suisse Zool., XVIII, p. 741 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 61 (♀); 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 14 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 122 (♀, ♂).

Type locality: Tabora, GERMAN EAST AFRICA.

ZULULAND: Umfolosi (I. Trägårdh). NORTHERN RHODESIA: Kazungula (Jallá). BRITISH EAST AFRICA: Gilgil, Rift Valley, 1980 m. (Alluaud and Jeannel). UGANDA: Bujongolo Region (C. Alluaud). ANGLO-EGYPTIAN SUDAN: Mongalla opposite Lado (F. Werner).

61. Var. **marshalli** EMERY, 1901, Mem. Accad. Sc. Bologna, (5) IX, p. 425 (♀, ♂), Pl. I, fig. 13. SANTSCHI, 1910, Rev. Suisse Zool., XVIII, p. 741 (♀). EMERY, 1910, 'Gen. Insect., Dorylinæ,' p. 10 (♀, ♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 122 (♀, ♂). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 402 (♀). See p. 43.

Type locality: Salisbury, SOUTHERN RHODESIA (H. Brauns).

.. MOZAMBIQUE: Valley of the Revoue (G. Vasse). BELGIAN CONGO: (Kohl); Medje (Lang and Chapin).

6a. Subsp. **zimmermanni** SANTSCHI, 1910, Rev. Suisse Zool., XVIII, pp. 737 and 738, figs. 1c and 2a-c (♀, ♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 123 (2, ♀, ♂).

Type locality: Madingu, FRENCH CONGO (P. Zimmermann).

SOUTHERN RHODESIA: Hillside, Bulawayo (G. Arnold).

6a1. Var. **bulawayensis** FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 364.

*Dorylus affinis* subsp. *zimmermanni* var. *bulawayensis* FOREL, 1914, *ibid.*, (5) L, p. 215 (♀).

Type locality: Bulawayo, RHODESIA (G. Arnold).

7. **Dorylus depilis** (EMERY) FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 71 (♂). EMERY, 1910, 'Gen. Insect., Dorylinae,' p. 10 (♂). SANTSCHI, 1910, Rev. Suisse Zool., XVIII, p. 737, fig. 1e (♂). FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 254 (♀); 1911, Rev. Zool. Afr., I, p. 274 (♂); 1913, *ibid.*, II, p. 312 (♂); 1913, Ann. Soc. Ent. Belgique, LVII, p. 348 (♂); 1913, Rev. Suisse Zool., XXI, p. 668 (♂). See p. 43.

*Dorylus affinis* var. *depilis* EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 708 and 720 (♂). MAYR, 1896, Ent. Tidskr., XVII, p. 230 (♂).

*Dorylus affinis* subsp. *depilis* FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 53 (♂); in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 4 (♂); 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 362 (♂). SANTSCHI, 1917, Bull. Soc. Hist. Nat. Afr. Nord, VIII, p. 19 (♂).

Type locality: GOLD COAST.

WEST AFRICA: (Fülleborn). TOGO. CAMEROON: (Sjöstedt; Conradt). NIGERIA: Old Calabar (Bates). BELGIAN CONGO: Sankuru (Luja); Valley of the Lubumbashi (Buttgenbach); Kitobola (Rovere); Lukula (Daniel); Kabambare (Flamand); Kapiri (Leplae); Api (Laplume); Sankisia (J. Bequaert); Dima (A. Koller); Faradje; Medje; Stanleyville (Lang and Chapin). GERMAN EAST AFRICA: Amani (Zimmer). BRITISH EAST AFRICA: Nairobi (H. Prell). UGANDA: (Benoit).

71. Var. **clarior** (SANTSCHI).

*Dorylus affinis* subsp. *depilis* var. *clarior* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 246 (♂); 1917, Bull. Soc. Hist. Nat. Afr. Nord, VIII, p. 19 (♂).

Type locality: Zambézie (Durand).

BELGIAN CONGO: Ubangi (Augustin). FERNANDO PO.

72. Var. **ugandensis** (SANTSCHI).

*Dorylus affinis* var. *ugandensis* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 59 (♂).

*Dorylus affinis* subsp. *depilis* var. *ugandensis* SANTSCHI, 1917, Bull. Soc. Hist. Nat. Afr. Nord, VIII, p. 19 (♂).

Type locality: Unyoro Province, east of Lake Albert, UGANDA (C. Alluaud).

8. **Dorylus furcatus** (GERSTÄCKER) DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 10. EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, p. 718 (♀); 1910, 'Gen. Insect., Dorylinae,' p. 10 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 124 (♀).

*Dichthadia furcata* GERSTÄCKER, 1872, Stettin. Ent. Zeitg., XXXIII, p. 267 (♀). EMERY, 1887, Bull. Soc. Ent. Italiana, XIX, p. 350 (♀), Pl. XI, figs. 4 and 5.

Type locality: SOUTH AFRICA.

According to Arnold this is perhaps only an individual variation of *D. helvolus* ♀ or a variety of that species.

9. **Dorylus gaudens** SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 244 (♂).

Type locality: Boga, BELGIAN CONGO (A. Pilette).

10. **Dorylus gribodoi** EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), p. 570 (♂), Pl. xv, fig. 15; 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 708 and 723, fig. O (♂). ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 5 (♂). FOREL, Mitt. Naturh. Mus. Hamburg, XXIV, p. 14 (♂). EMERY, 1910, 'Gen. Insect., Dorylinae,' p. 10 (♂). SANTSCHI, 1910, Rev. Suisse Zool., XVIII, p. 745 (♂); 1911, Ann. Soc. Ent. Belgique, LIV, p. 282 (♂). FOREL, 1913, Rev. Zool. Afr., II, p. 312 (♂).

Type locality: Amu, Togo.

LIBERIA: (Kieselbach). IVORY COAST: (A. Richard; Lohier). GOLD COAST. NIGERIA: Lower Benue (Lenfant). FRENCH CONGO: Ogowe (Mocquerys). BELGIAN CONGO: Kondué (Luja).

101. Var. **confusus** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 246 (♂).

Type locality: Grand Bassam, IVORY COAST (Lohier).

IVORY COAST: near Imbokro (Posth).

11. **Dorylus helvolus** (LINNÆUS) FABRICIUS, 1793, 'Ent. Syst.,' II, p. 365 (♂). COQUEBERT, 1801, 'Illustr. Iconogr. Ins.,' II, p. 65 (♂), Pl. xvi, fig. 1. LATREILLE, 1802, 'Hist. Nat. Crust. Ins.,' III, p. 352 (♂). FABRICIUS, 1804, 'Syst. Piez.,' p. 427 (♂). LATREILLE, 1805, 'Hist. Nat. Crust. Ins.,' XIII, p. 260 (♂, in part). JURINE, 1807, 'Nouv. Méth. Class. Hym.,' p. 281 (♂). LATREILLE, 1809, 'Gen. Crust. Ins.,' IV, p. 124 (♂). LEPELETIER, 1836, 'Hist. Nat. Ins. Hym.,' I, p. 228 (♂). BLANCHARD, 1840, 'Hist. Nat. Ins.,' III, p. 378 (♂). SCHUCKARD, 1840, Ann. Nat. Hist., V, p. 315 (♂). WESTWOOD, 1842, 'Arcana Ent.,' I, p. 79 (♂). FAIRMAIRE, in J. Thomson, 1858, 'Archives Entomologiques,' II, p. 263. F. SMITH, 1859, 'Cat. Hym. Brit. Mus.,' VII, p. 1, Pl. I, fig. 5. DUMÉRIL, 1860, Mém. Acad. Sc. Paris, XXXI, p. 901 (♂). ROGER, 1863, 'Verzeich. Formicid.,' p. 41. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 408. TRIMEN, 1880, Trans. Ent. Soc. London, Proc., p. xxiv, fig. and p. xxxiii (♀); 1881, Trans. South African Phil. Soc., II, 1, Proc., p. xvii. EMERY, 1887, Ann. Mus. Civ. Genova, XXV, p. 449, footnote (♀, ♂); 1887, Bull. Soc. Ent. Italiana, XIX, p. 349 (♀, ♀, ♂), Pl. xi, figs. 1-3 and 6-7. DISTANT, 1892, 'A Naturalist in the Transvaal,' p. 211. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 11. H. STADELMANN, 1893, Mitth. Deutsch. Schutzgeb., VI, p. 217. EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 17 (♀); *ibid.*, Bull. p. lxxiii, fig. (♀); 1895, Ann. Mus. Civ. Genova, XXXV, p. 177 (♀); 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 707, 708, and 714, figs. C-E (♀, ♂). WASMANN, 1897, Deutsch. Ent. Zeitschr., p. 278; 1898, Wien. Ent. Zeitg., XVII, p. 103. H. BRAUNS, *ibid.*, p. 226. WASMANN, 1899, Deutsch. Ent. Zeitschr., pp. 174 and 175; 1900, Zool. Jahrb. Abt. Syst., XIV, pp. 266, 268, and 274. EMERY, 1901, Mem. Accad. Sc. Bologna, (5) IX, pp. 416 and 428 (♀). H. BRAUNS, 1901, Zeitschr. f. Hym. u. Dipt., I, p. 16 (♂). BINGHAM, 1903, Ann. Mag. Nat. Hist., (7) XII, p. 61. WASMANN, 1904, Zool. Jahrb. Abt. Syst., Suppl. VII, p. 676. BINGHAM, 1906, Trans. Ent. Soc. London, Proc., p. xxvi. FOREL, 1907, Mitt. Naturh. Mus. Hamburg, XXIV, p. 14 (♂). MAYR, 1907, in Sjöstedt, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 7 (♀). DIXEY AND LONGSTAFF, 1907, Trans. Ent. Soc. London, pp. 334 and 376 (♂). EMERY, 1910, 'Gen. Insect., Dorylinae,' p. 10 (♀, ♂). FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 4 (♀, ♂); 1913, Rev. Zool. Afr., II, p. 311 (♀). BEQUAERT, *ibid.*, p. 423. SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd.,

III, p. 14 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 61 (♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 332 (♀). H. SCHMITZ, 1914, Zool. Jahrb. Abt. Syst., XXXVII, pp. 522 and 559. LAMBORN, 1914, Trans. Ent. Soc. London, (1913), Proc., p. cxxiii. ARNOLD, 1915, Ann. South African Mus., XIV, p. 116 (2, ♀, ♂), Pl. IV, figs. 33, 33a, 33b, 34, and 34a. WASMANN, 1916, Ent. Mitt. Deutsch. Ent. Mus. Berlin, V, p. 136; 1917, Zeitschr. Wiss. Zool., CXVII, pp. 304 and 352.

*Vespa helvola* LINNÆUS, 1764, 'Mus. Ludov. Ulric.,' p. 412 (♂).

*Mutilla helvola* LINNÆUS, 1767, 'Syst. Nat.,' Ed. 12, I, 2, p. 967 (♂). PH. L. MÜLLER, in Linnæus, 1775, 'Vollst. Natursyst.,' V, p. 920 (♂). FABRICIUS, 1787, 'Mantissa Insect.,' I, p. 313 (♂). GMELIN, 1790, in Linnæus, 'Syst. Nat.,' Ed. 13, I, 5, p. 2807 (♂). CHRIST, 1791, 'Naturg. d. Insect.,' p. 151 (♂).

*Mutilla dorylus* LAMARCK, 1817, 'Hist. Nat. Anim. s. Vertèbr.,' IV, p. 101 (♂); 1835, *ibid.*, 2e éd., IV, p. 316 (♂).

*Mutilla (Dorylus) helvolus* BLANCHARD, in Cuvier, 1849, 'Règne Animal,' Ed. 3, Insect., II, Pl. cxviii, fig. 1 (♂).

*Typhlopone punctata* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 112 (♀). ROGER, 1861, Berlin. Ent. Zeitschr., V, p. 45; 1863, 'Verzeich. Formicid.,' p. 20. MAYR, 1865, 'Reise Novara, Zool.,' II, Formicidæ, p. 74. W. F. KIRBY, 1884, Ann. Mag. Nat. Hist., (5) XIII, p. 406 (♀).

*Typhlopone europæa* ROGER, 1859, Berlin. Ent. Zeitschr., III, p. 248 (♀), Pl. VII, fig. 3. MAYR, 1861, 'Europ. Formicid.,' p. 53 (♀). ROGER, 1863, 'Verzeich. Formicid.,' p. 20. ERN. ANDRÉ, 1874, Rev. Mag. Zool., (3) II, p. 187 (♀). EMERY, 1876, Stettin. Ent. Zeitg., XXXVII, p. 72 (♀).

*Typhlopone europæa* MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 457.

*Typhlopone punctata* MAYR, *ibid.*, p. 457.

*Dorylus planifrons* MAYR, 1865, 'Reise Novara, Zool.,' II, Formicidæ, p. 74 (♂), Pl. III, fig. 21.

*Dorylus punctatus* ERN. ANDRÉ, 1882, 'Spec. Hym. Europ. Algérie,' II, p. 251 (♀), Pl. xv, fig. 5.

Type locality: Cape of Good Hope.

TOGO: Bismarckburg (Büttner). SOUTHERN NIGERIA: Agege (Lamborn). BELGIAN CONGO: Elisabethville (J. Bequaert). SOUTHERN RHODESIA: common (G. Arnold). TRANSVAAL: Barberton (Rendall); Pretoria (Wichgraf; F. Silvestri; Distant); Makapan; Hebron (E. Simon). ORANGE FREE STATE: Kroonstad (H. Brauns); Bloemfontein (E. Simon). CAPE PROVINCE: Cape Town (E. Simon; Schönland; Wilms); Dumbrody; Blue Cliff (O'Neil); East London (Dixey and Longstaff); Port Elizabeth (H. Brauns). NATAL: (Kluckauf); Estcourt (I. Trägårdh); Port Natal (Schultze); Durban (Wilms; Hahn); Ladysmith (Dixey and Longstaff). NYASALAND: Zomba; Fort Johnston (Rendall). GERMAN EAST AFRICA: Mombo, Usambara; Kibonoto, Mt. Kilimanjaro (Sjöstedt). BRITISH EAST AFRICA: Kenia Region, between the Nyeri and Amboni Rivers, 1800 m. (Alluaud and Jeannel). ABYSSINIA: Arussi Galla, Ganale Gudda (V. Bottego).

11. Var. *impressus* STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 127 (2, ♀).

Type locality: Alen, SPANISH GUINEA (Tessmann).

12. *Dorylus lobatus* SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 244 (♂).

Type locality: Lukolela, BELGIAN CONGO (Christy).

BELGIAN CONGO: Kabinda (Schwetz).

13. **Dorylus mandibularis** MAYR, 1896, Ent. Tidskr., XVII, p. 228 (♂). SJÖSTEDT, 1904, 'I Västafrikas Urskogar,' p. 157, footnote. EMERY, 1910, 'Gen. Insect., Dorylinæ,' p. 10 (♂).

Type locality: CAMEROON (Sjöstedt).

131. Var. **pulchellus** SANTSCHI, 1920, Ann. Soc. Ent. France, LXXXVIII, (1919), p. 361 (♂).

Type locality: Dimbroko, IVORY COAST (Le Mout).

14. **Dorylus mæstus** (EMERY) FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 71 (♂). EMERY, 1910, 'Gen. Insect., Dorylinæ,' p. 10 (♂). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 348 (♂). STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 374 (♂). See p. 43.

*Dorylus affinis* var. *mæstus* EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 708 and 720 (♂). FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 53 (♂).

Type locality: CONGO.

BELGIAN CONGO: Sankuru (Luja); Lukula (Daniel); Stanleyville (Lang and Chapin); Kimuenza (Schultze).

141. Var. **claripennis** SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 243 (♂).

Type locality: Lower Kasai, BELGIAN CONGO (Vanderyst).

142. Var. **morio** SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 243 (♂).

*Dorylus mæstus* SANTSCHI, 1910, Rev. Suisse Zool., XVIII, pp. 737 and 741, figs. 1b and 3 (♂).

Type locality: Madingu, FRENCH CONGO (Zimmermann).

14a. Subsp. **schereri** FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 254 (♂).

*Dorylus mæstus* var. *schereri* SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 244 (♂).

Type locality: LIBERIA (Scherer).

IVORY COAST: Dimbroko.

15. **Dorylus politus** EMERY, 1901, Mem. Accad. Sc. Bologna, (5) IX, pp. 416, 426, and 428 (♀), Pl. I, figs. 14-17; 1910, 'Gen. Insect., Dorylinæ,' p. 10 (♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 348 (♀); 1913, Rev. Suisse Zool., XXI, p. 668 (♀).

Type locality: CAMEROON (Conradt).

BELGIAN CONGO: Mayombe (de Briey). CAMEROON: Johann-Albrechtshöhe (Conradt).

16. **Dorylus spininodis** EMERY, 1901, Mem. Accad. Sc. Bologna, (5) IX, pp. 426 and 428 (♀), Pl. I, figs. 18-21. SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 352 (♀). EMERY, 1910, 'Gen. Insect., Dorylinæ,' p. 10 (♀). SANTSCHI, 1910, Rev. Suisse Zool., XVIII, p. 747 (♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 332 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 60 (♀).

Type locality: CAMEROON (Conradt).

CAMEROON: Victoria (F. Silvestri). NIGERIA: Benin; Olokemeji (F. Silvestri). FRENCH CONGO: Brazzaville (A. Weiss). UGANDA: Toro Province near Fort Portal (C. Alluaud).

16a. Subsp. **longiceps** VIEHMEYER, 1914, Arch. f. Naturg., LXXIX, Abt. A, Heft 12, (1913), p. 26, fig. 1 (♀).

Type locality: Manow, Langenburg, GERMAN EAST AFRICA.

17. **Dorylus stadelmanni** EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 708 and 722, figs. N and M (♂). FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 53 (♂). EMERY, 1910, 'Gen. Insect., Dorylinae,' p. 10 (♂).  
Type locality: CONGO.  
NORTHEASTERN AFRICA: Terwidja (von Erlanger).
18. **Dorylus staudingeri** EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 708 and 721 (♂); 1910, 'Gen. Insect., Dorylinae,' p. 10 (♂). See p. 43.  
Type locality: CONGO.  
BELGIAN CONGO: Medje (Lang and Chapin).
19. **Dorylus striatidens** SANTSCHI, 1910, Rev. Suisse Zool., XVIII, p. 745, fig. 5 (♀).  
Type locality: CASAMANCE (Claveau).  
SENEGAMBIA: Dakar (Melou).

### Subgenus 2. **Anomma** SHUCKARD

- Anomma* SHUCKARD, 1840, Ann. Nat. Hist., V, p. 326.  
*Dorylus* subg. *Anomma* EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 701 and 710; 1910, 'Gen. Insect., Dorylinae,' p. 10.  
*Sphedomyrme* IMHOFF, 1852, Verh. Naturf. Ges. Basel, X, p. 175.  
*Alaopone* (part) EMERY, 1881, Ann. Mus. Civ. Genova, XVI, p. 274.  
Subgenotype: *Anomma burmeisteri* Shuckard, 1840 = *Dorylus nigricans* Illiger (1802) subsp. *burmeisteri* (Shuckard).
20. **Dorylus (Anomma) emeryi** MAYR, 1896, Ent. Tidskr., XVII, p. 225 (♀). EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 462; 1901, Mem. Accad. Sc. Bologna, (5) IX, p. 428 (♀); 1910, 'Gen. Insect., Dorylinae,' p. 11 (♀). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 127 (♀). SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, p. 154, figs. A7 and B9 (♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 333 (♀). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 402 (♀).  
*Dorylus emeryi* Sjöstedt, 1904, 'I Västafrikas Urskogar,' p. 157, footnote.  
Type locality: CAMEROON (Sjöstedt; Conradt).  
GOLD COAST: Aburi (F. Silvestri). CAMEROON: Mundame (Conradt). BELGIAN CONGO: (Kohl).
- 20<sub>1</sub>. Var. **pulsi** FOREL, 1904, Ann. Soc. Ent. Belgique, XLVIII, p. 170 (♀). EMERY, 1910, 'Gen. Insect., Dorylinae,' p. 11 (♀); SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, p. 154 (♀).  
Type locality: West Africa.
- 20<sub>a</sub>. Subsp. **opacus** FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 58 (♀). EMERY, 1910, 'Gen. Insect., Dorylinae,' p. 11 (♀). FOREL, 1911, Rev. Suisse Zool., XIX, p. 452 (♂); 1913, Ann. Soc. Ent. Belgique, LVII, p. 348 (♀). See p. 43.  
*Dorylus (Anomma) opacus* SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, pp. 154 and 157, figs. A8, B3, and B10 (♀, ♂). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 402 (♂).  
*Dorylus (Anomma) emeryi* var. *opaca* STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 127 (♀, ♀).  
Type locality: Lower Congo, in stomach of *Manis temmincki* (Solon).  
BELGIAN CONGO: (Kohl); Mayombe (de Brie); Medje; Ngayu (Lang and Chapin). CAMEROON: Mundame (Conradt). FERNANDO PO: (Conradt). FRENCH CONGO: Gaboon (F. Faure).

21. **Dorylus (Anomma) funereus** EMERY, 1910, 'Gen. Insect., Dorylinæ,' p. 11 (♂). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 402 (♂). See p. 44.

*Dorylus (Anomma) nigricans* var. *funereus* EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 708 and 712 (♂); 1899, Ann. Soc. Ent. Belgique, XLIII, p. 461. FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 70 (♂); 1913, Rev. Zool. Afr., II, p. 311 (♂); 1913, Rev. Suisse Zool., XXI, p. 667 (♂); 1913, Ann. Soc. Ent. Belgique, LVII, p. 348 (♂).

Type locality: GOLD COAST.

BELGIAN CONGO: Sankuru; Kondué (Luja); Lukula (Daniel); Medje; Stanleyville; Bolobo to Lukolela (Lang and Chapin). CAMEROON: (Conradt).

22. **Dorylus (Anomma) gerstäckeri** EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 707 and 713 (♀), Pl. xvii, fig. 11.

*Anomma gerstäckeri* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 462 (♀).

*Dorylus (Anomma) gerstäckeri* EMERY, 1901, Mem. Accad. Sc. Bologna, (5) IX, pp. 416, 427, and 428 (♀), Pl. I, fig. 22; 1910, 'Gen. Insect., Dorylinæ,' p. 11 (♀); SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 332 (♀).

*Dorylus (Anomma) gerstäckeri* SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, p. 154 (♀).

Type locality: Akra, GOLD COAST.

GOLD COAST: Aburi (F. Silvestri). CAMEROON: (Conradt).

22a. Subsp. **quadratus** SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 430 (2).

Type locality: MANOW, GERMAN EAST AFRICA.

23. **Dorylus (Anomma) kohli** WASMANN, 1904, Zool. Jahrb. Abt. Syst., Suppl. VII, pp. 669 and 675 (♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXXVIII, (1909), p. 352 (♀). EMERY, 1910, 'Gen. Insect., Dorylinæ,' p. 11 (♀). FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 254 (♀). SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, p. 154, fig. C1 (♀). WASMANN, 1916, Ent. Mitt. Deutsch. Ent. Mus. Berlin, V, pp. 105 and 147; 1917, Zeitschr. Wiss. Zool., CXVII, pp. 290 and 322. See p. 44.

*Anomma kohli* H. SCHMITZ, 1914, Zool. Jahrb. Abt. Syst., XXXVII, pp. 515 and 540, footnote; 1915, Deutsch. Ent. Zeitschr., p. 487. WASMANN, 1915, Ent. Mitt. Deutsch. Ent. Mus. Berlin, IV, p. 204.

Type locality: Stanleyville, BELGIAN CONGO (Kohl).

NIGERIA: Old Calabar (Bates). FRENCH CONGO: Brazzaville (A. Weiss). BELGIAN CONGO: Akenge; Niangara; Avakubi (Lang and Chapin); St. Gabriel (Kohl).

23<sub>1</sub>. Var. **chapini** WM. M. WHEELER. See p. 45 (♀).

Type locality: Stanleyville, BELGIAN CONGO (Lang and Chapin).

23<sub>2</sub>. Var. **congolensis** SANTSCHI, 1910, Ann. Soc. Ent. France, LXXXVIII, (1909), p. 352, fig. 1 (♀); 1912, Ann. Soc. Ent. Belgique, LVI, pp. 154 and 158, figs. A6, B11, and C2 (♀). See p. 45.

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

FRENCH CONGO: N'Douna (A. Weiss). BELGIAN CONGO: Leopoldville (Lang and Chapin); Thysville (J. Bequaert).

23<sub>3</sub>. Var. **frenisyi** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 402 (♀).

Type locality: BELGIAN CONGO (Kohl).

23<sub>4</sub>. Var. **langi** WM. M. WHEELER. See p. 45 (♀).

Type locality: Malela, BELGIAN CONGO (Lang and Chapin).

23 $\frac{1}{2}$ . Var. **minor** SANTSCHI, 1911, Rev. Zool. Afr., I, p. 206 (♀); 1912, Ann. Soc. Ent. Belgique, LVI, p. 155, figs. A9 and B8 (♀).

Type locality: Cucala, BENGUELA (J. Cruchet).

24. **Dorylus (Anomma) mayri** SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, pp. 155 and 159, figs. A10, B7 and B13 (♀).

Type locality: CAMEROON.

25. **Dorylus (Anomma) nigricans** ILLIGER. EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 706, 708, and 710 (♀, ♂), Pl. XIV, figs. 1a-g. MAYR, 1896, Ent. Tidskr., XVII, p. 225 (♀, ♂). EMERY, 1901, Mem. Accad. Sc. Bologna, (5) IX, pp. 416 and 428 (♀). FOREL, 1901, Mitt. Naturh. Mus. Hamburg, XVIII, p. 47 (♂); 1907, *ibid.*, XXIV, p. 15 (♂); 1909, Ann. Soc. Ent. Belgique, LIII, p. 51 (♂). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 352 (♂). FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 248 (♀). EMERY, 1910, 'Gen. Insect., Dorylinae,' p. 12 (♀, ♂). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 128 (2, ♀, ♂); 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08),' III, p. 375 (♀). FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 362 (♀); 1912, Mitt. Naturh. Mus. Hamburg, XXIX, p. 177, Pl., figs. 1, 3a, 4a, and 6-8 (♀, ♀). SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, p. 156 (♀). FOREL, 1913, *ibid.*, LVII, p. 348 (♀); 1913, Rev. Zool. Afr., II, p. 311 (♂). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 332 (♂); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 62 (♂). FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 216 (♂).

*Dorylus nigricans* ILLIGER, 1802, Mag. f. Insectenk., I, p. 188 (♂). FABRICIUS, 1804, 'Syst. Piez.,' p. 427 (♂). JURINE, 1807, 'Nouv. Méth. Class. Hym.,' p. 281 (♂). LATREILLE, 1809, 'Gen. Crust. Ins.,' IV, p. 124 (♂). SHUCKARD, 1840, Ann. Nat. Hist., V, p. 271 (♂). WESTWOOD, 1842, 'Arcana Ent.,' I, p. 79 (♂). GUÉRIN, in Lefebvre, 1848, 'Voy. Abyssinie,' IV, Zool., pt. 6, p. 353. F. SMITH, 1859, 'Cat. Hym. Brit. Mus.,' VII, p. 2 (♂), Pl. I, fig. 7. ROGER, 1863, 'Verzeich. Formicid.,' p. 41. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 408. GERSTÄCKER, 1871, Arch. f. Naturg., XXXVII, 1, p. 355; 1873, in 'v. d. Decken's Reisen in Ost-Afrika, Gliederthiere,' p. 357 (♂). RITSEMA, 1874, Tijdschr. v. Ent., XVII, p. 182 (♂). EMERY, 1892, Ann. Soc. Ent. France, LXI, Bull., p. liv; 1892, *ibid.*, XL, (1891), p. 555. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 12. H. STADELMANN, 1893, Mitth. Deutsch. Schutzgeb., VI, p. 217. ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 5 (♂). H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 42. MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicid.,' p. 1 (♂). F. C. WELLMAN, 1908, Ent. News, XIX, p. 226. ZAVATTARI, 1909, 'Il Ruwenzori, Parte Scientific.,' I, p. 212 (♀). BINGHAM, 1909, Trans. Zool. Soc. London, XIX, p. 180. BEQUAERT, 1913, Rev. Zool. Afr., II, p. 423. LAMBORN, 1914, Trans. Ent. Soc. London, (1913), Proc., p. exxiii; 1914, *ibid.*, (1914), Proc., p. vi. G. D. H. CARPENTER, 1915, *ibid.*, (1914), Proc., p. cvii.

? *Dorylus* sp. WATERHOUSE, 1907, Trans. Ent. Soc. London, Proc., p. vi, figs. (2, ♀).

? *Dorylus nigritarsis* E. STRAND, 1911, Jahrb. Nassau. Ver. Naturk. Wiesbaden, LXIV, p. 118 (♀).

Type locality: SIERRA LEONE.

LIBERIA: (Kieselbach). FRENCH GUINEA: Konakry (F. Silvestri). IVORY COAST: Assinie (C. Alluaud). NIGERIA: Moor Plantation near Ibadan; Agege (Lamborn). CAMEROON: (Sjöstedt); Mowange (C. Feldmann); Jabassi (Riggen-



bach); Yaunde (Scheunemann); Bipindi (Zenker); Bibundi (Tessmann); Mukonje Farm (R. Rohde). SPANISH GUINEA: Alen (Tessmann). FRENCH CONGO: Brazzaville (A. Weiss). PORTUGUESE CONGO: Landana. BELGIAN CONGO: Elisabethville, Katanga (J. Bequaert); Congo da Lemba (R. Mayné); Kitobola (Rovere); Mayombe (de Briey; Cabra); Chikai (Cabra); Zambi (don Lopez); northwestern shore of Lake Tanganyika (Grauer). NYASALAND: Madona, Nyamyas (Montgomery). GERMAN EAST AFRICA: Amani (Zimmer); Tanga (H. Prell). ZANZIBAR: (Stuhlmann). BRITISH EAST AFRICA: Bura Mts. (v. d. Decken). UGANDA: M'Bale (C. Alluaud); Bihunga (Duke of Abruzzi); Mubuku Valley, eastern slopes of Mt. Ruwenzori, 5000-7000 ft. (Woosnam); Bugalla Island; Damba Island (G. D. H. Carpenter). WESTERN ABYSSINIA: (Ilg). ANGLO-EGYPTIAN SUDAN: Renk (I Trägårdh).

25a. Subsp. *arcens* (WESTWOOD) EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 706 and 710 (♀); 1910, 'Gen. Insect., Dorylinæ,' p. 12 (♀). SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, pp. 157 and 160, figs. A1 and B4 (♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 332 (2, ♀). STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 373 (♀). See p. 46.

*Anomma arcens* WESTWOOD, 1847, Trans. Ent. Soc. London, V, p. 17 (♀), Pl. I, figs. 3 and 3a-f. SAVAGE, 1849, Proc. Acad. Nat. Sci. Philadelphia, IV, p. 196 (♀). F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 114, Pl. VIII, fig. 3. ROGER, 1861, Berlin. Ent. Zeitschr., V, p. 46 (♀); 1863, 'Verzeich. Formicid.,' p. 20. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 394. PERKINS, 1869, American Naturalist, III, pp. 360-364 (♀). EMERY, 1892, Ann. Soc. Ent. France, LXI, Bull., p. liv. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 8. M. L. SYKES, 1900, Trans. Manchester Microsc. Soc., XX, (1899), p. 89.

*Anomma burmeisteri* subsp. *arcens* EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), p. 554 (♀).

*Anomma pubescens* ROGER, 1861, Berlin. Ent. Zeitschr., V, p. 47 (♀); 1863, 'Verzeich. Formicid.,' p. 21. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 395. EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, p. 711 (♀).

*Dorylus (Anomma) nigricans* subsp. *burmeisteri* var. *arcens* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 352 (♀).

Type locality: Cape Palmas, LIBERIA (Savage).

SIERRA LEONE: Kortright Hill (W. G. Clements). IVORY COAST: (Lohier); Assinie (C. Alluaud). GOLD COAST: Aburi (F. Silvestri). FRENCH CONGO: Fort Crampel (Schubotz); Brazzaville (A. Weiss); Gaboon. BELGIAN CONGO: Medje (Lang and Chapin).

25b. Subsp. *burmeisteri* (SHUCKARD) EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 706 and 710-713, figs. A, B (♀, ♂). WASMANN, 1904, *ibid.*, Suppl. VII, pp. 671 and 675 (♀). SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, p. 157, figs. A4, B12, and B16 (♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 332 (♀). See p. 46.

*Anomma burmeisteri* SHUCKARD, 1840, Ann. Nat. Hist., V, p. 326 (♀). WESTWOOD, 1840, Ann. Mag. Nat. Hist., VI, p. 88 (♀), Pl. II, figs. 4 and 4a. F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 114, Pl. VIII, fig. 2. ROGER, 1861, Berlin. Ent. Zeitschr., V, p. 46 (♀); 1863, 'Verzeich. Formicid.,' p. 20. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 395. EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), p. 554 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 9. MAYR, 1893, Jahrb. Ham-

burg. Wiss. Anst., X, 2, p. 200. WASMANN, 1894, 'Verzeichn. Myrmecoph. Termitoph. Arthrop.', p. 77. ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 5 (♀). WASMANN, 1916, Ent. Mitt. Deutsch. Ent. Mus. Berlin, V, p. 143; 1917, Zeitschr. Wiss. Zool., CXVII, p. 318.

*Dorylus (Anomma) burmeisteri* STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 373 (♀).

Type locality: SIERRA LEONE (D. F. Morgan).

SENEGAMBIA. NIGERIA: Ibadan (F. Silvestri). FERNANDO Po: on the Peak, at 2400 m. (Schultze). CAMEROON: Grand Batanga (G. Schwab). FRENCH CONGO: Ogowe (Mocquerys). BELGIAN CONGO: Duma; Libenge (Schubotz); Katala (J. Bequaert); Stanleyville; Lukolela to Basoko (Lang and Chapin). GERMAN EAST AFRICA: Mhonda (Stuhlmann). ZANZIBAR: (Stuhlmann).

25b<sub>1</sub>. Var. *hybridus* SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, pp. 157 and 161, fig. B14 (♀). F. SILVESTRI, 1913, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 145. SANTSCHI, 1914, *ibid.*, p. 332 (♀). F. SILVESTRI, 1914, 'Report Exped. to Africa in Search Nat. Enem. Fruit Flies,' p. 128.

Type locality: CASAMANCE (Claveau).

FRENCH GUINEA: Konakry; Kakoulima; Kindia (F. Silvestri).

25b<sub>2</sub>. Var. *molestus* (GERSTÄCKER) MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 7 (♀). SJÖSTEDT, 1908, *ibid.*, II, 8, p. 108. SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, pp. 156 and 162, figs. A5 and B15 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 62 (♀).

*Anomma molesta* GERSTÄCKER, 1858, Monatsb. Ak. Wiss. Berlin, p. 262 (♀). ROGER, 1861, Berlin. Ent. Zeitschr., V, p. 47. GERSTÄCKER, in Peters, 1862, 'Reise n. Mossambique,' Zool., V, p. 302 (♀), Pl. xxxii, fig. 2. ROGER, 1863, 'Verzeich. Formicidæ,' p. 21. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 395. GERSTÄCKER, 1871, Arch. f. Naturg., XXXVII, 1, p. 355; 1873, in 'v. d. Decken's Reisen in Ost Afrika, Gliederthiere,' p. 347 (♀). EMERY, 1887, Bull. Soc. Ent. Italiana, XIX, p. 348, footnote. WASMANN, 1915, Ent. Mitt. Deutsch. Ent. Mus. Berlin, IV, pp. 30 and 290.

*Anomma burmeisteri* EMERY, 1881, Ann. Mus. Civ. Genova, XVI, p. 271, figs. (♀) (*nec* Shuckard).

*Anomma burmeisteri* var. *molesta* EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), p. 554 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 9.

*Dorylus (Anomma) nigricans* var. *molestus* EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, p. 710 (♀); 1901, Mem. Accad. Sc. Bologna, (5) IX, p. 416 (♀). WASMANN, 1904, Zool. Jahrb. Abt. Syst., Suppl. VII, pp. 671-673 and 675 (♀). ZAVATTARI, 1907, Boll. Mus. Zool. Anat. Comp. Torino, XXII, No. 550, p. 2 (♀). EMERY, 1910, 'Gen. Insect., Dorylinae,' p. 12. STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08),' III, p. 375 (♀, ♂). SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, p. 162 (♀). SWYNNERTON, 1916, Trans. Ent. Soc. London, (1915), pp. 317-348 (♀).

*Dorylus (Anomma) nigricans* subsp. *molesta* EMERY, 1912, Annuar. Mus. Zool. Univ. Napoli, N. S., III, No. 26, p. 1 (♀, ♀).

*Alaopone antinorii* EMERY, 1881, Ann. Mus. Civ. Genova, XVI, p. 275, figs. (♀).

*Dorylus antinorii* EMERY, 1887, Bull. Soc. Ent. Italiana, XIX, p. 349. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 10.

*Dorylus (Alaopone) antinorii* EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 707 and 736 (♀).

Type locality: Tete, PORTUGUESE EAST AFRICA (Peters).

BENGUELA: (J. Cruchet). PORTUGUESE EAST AFRICA: Mts. of Morumballe on the Zambesi R. (Luja). RHODESIA: Kazungula (Jallá); Mt. Chirinda (Swynnerton); Luapula River (Elena d'Aosta). GERMAN EAST AFRICA: Ruanda (Elena d'Aosta); Mt. Karisimbi; southern Mpororo; Isalinio (Schubotz); Usambara (Vosseler); New Moschi, Mt. Kilimanjaro, 800 m.; Kilema, 1400-1500 m. (Alluaud and Jeannel); Kibonoto, Mt. Kilimanjaro; Mt. Meru, 3000 m. (Sjöstedt). UGANDA: Unyoro Province, Lake Albert Region, Waki River; Mt. Ruwenzori, eastern slope, 1600 m. (C. Alluaud). BRITISH EAST AFRICA: Mt. Kenia, 2400-2800 m.; Bura Mts., Wa-Taita Province (v. d. Decken; C. Alluaud); Mombasa, Freretown; Naivasha, Rift Valley (Alluaud and Jeannel). ABYSSINIA: Let Marefia, Schoa (Antinori).

25b<sub>3</sub>. Var. *ornatus* SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, pp. 157 and 161 (♀).

Type locality: CAMEROON.

25b<sub>4</sub>. Var. *pallidus* SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, pp. 157 and 160, fig. B1 (♀).

Type locality: CAMEROON.

25b<sub>5</sub>. Var. *rubellus* (SAVAGE) SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 352 (♀); 1912, Ann. Soc. Ent. Belgique, LVI, p. 157, fig. B2 (♀). See p. 47.

*Anomma rubella* SAVAGE, 1849, Proc. Acad. Nat. Sci. Philadelphia, IV, p. 196 (♀). F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 199 (♀). ROGER, 1861, Berlin. Ent. Zeitschr., V, p. 47 (♀); 1863, 'Verzeich. Formicid.,' p. 21. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 395. F. SMITH, 1863, Trans. Ent. Soc. London, (3) I, p. 470 (♀).

*Anomma pubescens* EMERY, 1881, Ann. Mus. Civ. Genova, XVI, p. 273.

*Anomma burmeisteri* var. *rubella* EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), p. 554 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 9. WASMANN, 1904, Zool. Jahrb. Abt. Syst., Suppl. VII, pp. 672 and 675 (♀); 1916, Ent. Mitt. Deutsch. Ent. Mus. Berlin, V, pp. 95, 96, 97, 102, 104, 137, 140, and 146; 1917, Zeitschr. Wiss. Zool., CXVII, pp. 271, 275, 298, 314, 319, and 321.

*Dorylus (Anomma) nigricans* var. *rubellus* EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, p. 710 (♀); 1899, Ann. Soc. Ent. Belgique, XLIII, p. 462 (♀). SJÖSTEDT, 1908, 'Exped. Kilimandjaro, Meru., etc.,' II, 8, p. 111. EMERY, 1910, 'Gen. Insect., Dorylinæ,' p. 12. FOREL, 1911, Rev. Zool. Afr., I, p. 275 (♀). SANTSCHI, *ibid.*, p. 206. FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 348 (♀).

*Dorylus nigricans* var. *rubellus* SJÖSTEDT, 1904, 'I Västafrikas Urskogar,' p. 157, footnote.

*Dorylus (Anomma) rubellus* FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 77 (♀).

*Anomma nigricans* subsp. *rubella* WASMANN, 1915, Ent. Mitt. Deutsch. Ent. Mus. Berlin, IV, p. 289.

Type locality: Mpongwe District, FRENCH CONGO (Savage).

CAMEROON: Buea (German Deep Sea Exp.). FRENCH CONGO: Gaboon. BELGIAN CONGO: Lukula (Daniel); Mayombe (de Briey); St. Gabriel near Stanleyville (H. Kohl); Boma (Lang and Chapin). BENGUELA: (J. Cruchet). GERMAN EAST AFRICA: Mafia Island (Voeltzkow).

25c. Subsp. *sjöstedti* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 461 (♀); 1910, 'Gen. Insect., Dorylinae,' p. 12. SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, pp. 156 and 160, figs. A2, B5, and B17 (♀). See p. 48.

*Dorylus nigricans* var. *sjöstedti* SJÖSTEDT, 1904, 'I Västafrikas Urskogar,' p. 157, footnote; 1908, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 111.

*Anomma nigricans* subsp. *arcens* MAYR, 1896, Ent. Tidskr., XVII, p. 225 (♀) (*nec* Westwood).

*Anomma nigricans* subsp. *sjöstedti* WASMANN, 1904, Zool. Jahrb. Abt. Syst., Suppl. VII, p. 672 (♀). REICHENSPERGER, 1915, Ent. Mitt. Deutsch. Ent. Mus. Berlin, IV, p. 124.

*Dorylus* (*Anomma*) *nigricans* subsp. *sjöstedti* STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 128 (♂, ♀). WASMANN, 1912, Zool. Anzeiger, XXXIX, p. 473.

*Anomma sjöstedti* WASMANN, 1913, Ann. Rept. Smiths. Inst. for 1912, p. 471. H. SCHMITZ, 1914, Zool. Jahrb. Abt. Syst., XXXVII, p. 540. WASMANN, 1915, Ent. Mitt. Deutsch. Ent. Mus. Berlin, IV, pp. 31 and 32; 1916, *ibid.*, V, pp. 96, 102, 107, 142, and 145; 1917, Zeitschr. Wiss. Zool., CXVII, pp. 271, 298, 302, 314, 321, and 330.

*Anomma sjöstedti* H. SCHMITZ, 1917, Zoolog. Meded. Mus. Leiden, III, p. 125. Type locality: CAMEROON (Sjöstedt).

FERNANDO PO: (Conradt). CAMEROON: (Mansfeld; Zenker); Mundame (Conradt); Molundu (Reichensperger); Victoria (German Deep Sea Exp.); Lolodorf; Grand Batanga (G. Schwab). FRENCH CONGO: Krebedje, southern Darbanda (Decorse). BELGIAN CONGO: Faradje; Medje; Niangara (Lang and Chapin).

25c1. Var. *rufescens* (WASMANN) EMERY, 1910, 'Gen. Insect., Dorylinae,' p. 12.

*Anomma nigricans* subsp. *sjöstedti* var. *rufescens* WASMANN, 1904, Zool. Jahrb. Abt. Syst., Suppl. VII, p. 673 (♀).

*Dorylus* (*Anomma*) *nigricans* subsp. *burmeisteri* var. *rufescens* SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, pp. 157 and 161, figs. A3, B6, and B18 (♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 332 (♀).

*Dorylus* (*Anomma*) *nigricans* subsp. *rufescens* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 247, fig. 3 (♀).

*Dorylus* (*Anomma*) *nigricans* subsp. *rubescens* SANTSCHI, 1917, *ibid.*, LXXXV, (1916), p. 278 (♀).

*Anomma sjöstedti* var. *rufescens* WASMANN, 1915, Ent. Mitt. Deutsch. Ent. Mus. Berlin, IV, p. 32; 1916, *ibid.*, V, p. 107; 1917, Zeitschr. Wiss. Zool., CXVII, p. 330.

Type locality: Victoria, CAMEROON (German Deep Sea Exp.; F. Silvestri).

CAMEROON: Yukaduma (Funck); Grand Batanga; Lolodorf (G. Schwab). FRENCH CONGO: Samkita (F. Faure).

25c2. Var. *sjöstedti-wilverthi* (WASMANN).

*Anomma sjöstedti* var. *sjöstedti-wilverthi* WASMANN, 1916, Ent. Mitt. Deutsch. Ent. Mus. Berlin, V, pp. 136 and 146; 1917, Zeitschr. Wiss. Zool., CXVII, pp. 305 and 321 (♀).

Type locality: Grand Batanga, CAMEROON (G. Schwab).

26. *Dorylus* (*Anomma*) *stanleyi* FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 52 (♂). EMERY, 1910, 'Gen. Insect., Dorylinae,' p. 12 (♂). FOREL, 1912, Ent. Mitt. Deutsch. Ent. Mus. Berlin, I, p. 81 (♂). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 63 (♂). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 402 (♂).

?*Dorylus* (*Anomma*) *emeryi* FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 52 (♂).

Type locality: Katanga, BELGIAN CONGO (Lemaire).

BELGIAN CONGO: (Kohl); Mawambi. BRITISH EAST AFRICA: Molo, Mau Escarpment, 2420 m.; Wambogo, Wa-Kikuyu, 1750 m.; Mt. Kenia, eastern slope, 1900–2000 m. (Alluaud and Jeannel). UGANDA: Unyoro Province, Lake Albert Region (C. Alluaud).

27. *Dorylus* (*Anomma*) *wilwerthi* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 459, fig. (♀); 1901, Mem. Accad. Sc. Bologna, (5) IX, pp. 417 and 428 (♀), Pl. I, figs. 23–25. WASMANN, 1904, Zool. Jahrb. Abt. Syst., Suppl. VII, p. 674. EMERY, 1910, 'Gen. Insect., Dorylinae,' p. 12 (♀, ♂). FOREL, 1912, Mitt. Naturh. Mus. Hamburg, XXIX, p. 177 (♀, ♀), Pl., figs. 2, 3b, 4b, 5, 9a, and 9b. See p. 48.

*Anomma wilwerthi* WASMANN, 1900, Zool. Jahrb. Abt. Syst., XIV, pp. 257 and 263 (♀); 1904, *ibid.*, Suppl. VII, pp. 660 and 671; 1911, 1er Congr. Intern. Entom. Bruxelles (1910), II, Mém., pp. 227 and 229, Pl. xxv, fig. 23; 1913, Ann. Rept. Smiths. Inst. for 1912, pp. 469 and 471, Pl. vii, fig. 23; 1915, Ent. Mitt. Deutsch. Ent. Mus. Berlin, IV, pp. 30, 31, 33, 34, 204, and 289; 1916, *ibid.*, V, pp. 94, 95, 97, 98, 101, 104, 107, 108, 137, 140, 142, 143, and 146; 1917, Zeitschr. Wiss. Zool., CXVII, pp. 262, 271, 275, 276, 282, 296, 313, 318, 319, 321, 330, and 353.

*Dorylus* (*Anomma*) *wilwerthi* WASMANN, 1900, Zool. Jahrb. Abt. Syst., XIV, p. 274. FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, pp. 51 and 70 (♀, ♂). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 352 (♀). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 128 (♀, ♀). SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, p. 155. FOREL, 1913, Rev. Zool. Afr., II, p. 311 (♂); 1913, Ann. Soc. Ent. Belgique, LVII, p. 348 (♀); 1916, Rev. Suisse Zool., XXIV, p. 402 (♂). STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910–11,' I, p. 373 (♀).

*Anomma nigricans* ERN. ANDRÉ, 1900, Bull. Mus. Hist. Nat. Paris, VI, p. 365, 4 figs. (♀) (*nec* Illiger).

*Anomma wilwerthi* WASMANN, 1907, Atti Accad. Pontif. Nuov. Lincei, LX, Sess. 7, pp. 1–6.

Type locality: Leopoldville, BELGIAN CONGO (Wilwerth).

IVORY COAST: Ouossou (Talbot). FRENCH CONGO: Brazzaville; Krebedje (A. Weiss). BELGIAN CONGO: Umangi (Wilwerth); Iringui (Lindemann); Mobeka (Lothaire); Kimpoke (Büttner); Ganda Sundi (R. Mayné); Kondué; Sankuru (Luja); St. Gabriel (Kohl); Akenge; Medje; Faradje; Avakubi (Lang and Chapin); Kwesi to Kilo (Bayer); Beni (Borgerhoff); Kimuenza (Schultze); Duma (Schubotz).

### Subgenus 3. *Typhlopone* WESTWOOD

*Typhlopone* WESTWOOD, 1840, 'Introd. Class. Insects,' II, p. 219.

*Dorylus* subg. *Typhlopone* EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 701 and 723; 1910, 'Gen. Insect., Dorylinae,' p. 12.

*Cosmaecetes* SPINOLA, 1853, Mem. Accad. Sc. Torino, (2) XIII, p. 70.

Subgenotype: *Typhlopone fulva* Westwood, 1840.

28. *Dorylus* (*Typhlopone*) *fulvus* (WESTWOOD) EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 707, 709, and 723, figs. P, Q (♀, ♂); 1899, Ann. Mus. Civ. Genova, XXXIX, p. 499 (♀); 1901, Mem. Accad. Sc. Bologna, (5) IX, pp. 416 and 428 (♀); 1910, 'Gen. Insect., Dorylinae,' p. 13. STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 128 (♀).

*Dorylus helvolus* LATREILLE, 1805, 'Hist. Nat. Crust. Ins.,' XIII, p. 260 (♂, in part), Pl. c, fig. 10 (*nec* Linnæus).

*Typhlopone fulva* WESTWOOD, 1840, 'Introd. Class. Insects,' II, p. 219 (♀); 1840, Ann. Mag. Nat. Hist., VI, p. 87 (♀), Pl. II, figs. 1 and 1a-g. F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 110. ROGER, 1861, Berlin. Ent. Zeitschr., V, p. 45; 1863, 'Verzeich. Formicid.,' p. 20.

*Labidus* (*Typhlopone*) *kirbii* SHUCKARD, 1840, Ann. Nat. Hist., V, p. 265 (♀).

*Labidus* (*Typhlopone*) *thwaitesii* SHUCKARD, *ibid.*, p. 326 (♀).

*Labidus* (*Typhlopone*) *spinolæ* SHUCKARD, *ibid.*, p. 327 (♀).

*Dorylus juvenculus* SHUCKARD, *ibid.*, p. 318 (♂). WESTWOOD, 1842, 'Arcana Ent.,' I, p. 80 (♂). LUCAS, 1846, 'Explor. Sc. Algérie,' Zool., III, p. 299 (♂). ERN. ANDRÉ, 1882, 'Spec. Hym. Europ. Algérie,' II, p. 254 (♂), Pl. xv, figs. 10-12. EMERY, 1887, Bull. Soc. Ent. Italiana, XIX, p. 350; 1891, 'Explor. Tunisie, Fourmis,' p. 1 (♂). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 11. WASMANN, 1899, Deutsch. Ent. Zeitschr., p. 175; 1900, Zool. Jahrb. Abt. Syst., XIV, p. 274. BINGHAM, 1903, Ann. Mag. Nat. Hist., (7) XII, p. 61 (♂). WASMANN, 1904, Zool. Jahrb. Abt. Syst., Suppl. VII, p. 676.

*Dorylus labiatus* SHUCKARD, 1840, Ann. Nat. Hist., V, p. 319 (♂).

*Typhlopone shuckardi* WESTWOOD, 1840, Ann. Mag. Nat. Hist., VI, p. 88 (♀), Pl. II, fig. 2. F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 111. ROGER, 1863, 'Verzeich. Formicid.,' p. 20.

*Typhlopone dahlbomi* WESTWOOD, 1840, Ann. Mag. Nat. Hist., VI, p. 88 (♀), Pl. II, figs. 3a-b. F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 111. ROGER, 1863, 'Verzeich. Formicid.,' p. 20.

*Typhlopone oraniensis* LUCAS, 1846, 'Explor. Sc. Algérie,' Zool., III, p. 302 (♀), Pl. xvi, figs. 11 and 11a-g; 1853, Ann. Soc. Ent. France, (3) I, Bull., pp. xxxvii-xxxix (♀). NYLANDER, 1856, Ann. Sc. Nat. Zool., (4) V, p. 76 (♀), Pl. III, figs. 24-26.

*Cosmaecetes homalinus* SPINOLA, 1853, Mem. Accad. Sc. Torino, (2) XIII, p. 71 (♀). EMERY, 1893, Boll. Mus. Zool. Anat. Comp. Torino, VIII, No. 163, p. 1.

*Typhlopone oraniensis* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 112. MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 737 (♀). ROGER, 1863, 'Verzeich. Formicid.,' p. 20. EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 381, fig. (♀). PASCOE, 1878, Trans. Ent. Soc. London, Proc., p. xxxviii. ERN. ANDRÉ, 1882, 'Spec. Hym. Europ. Algérie,' II, Pl. I, fig. 13 (♀). FOREL, 1885, Journ. Asiat. Soc. Bengal, LIV, p. 177 (♀).

*Typhlopone homalina* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 111. ROGER, 1863, 'Verzeich. Formicid.,' p. 20.

*Typhlopone spinolæ* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 111. ROGER, 1863, 'Verzeich. Formicid.,' p. 20.

*Typhlopone thwaitesi* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 111. ROGER, 1863, 'Verzeich. Formicid.,' p. 20.

*Typhlopone spinolæ* MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 457.

*Typhlopone thwaitesi* MAYR, *ibid.*, p. 457.

*Typhlopone dahlbomi* MAYR, *ibid.*, p. 457.

*Typhlopone shuckardi* MAYR, *ibid.*, p. 457.

*Typhlopone fulva* MAYR, *ibid.*, p. 457.

*Typhlopone oraniensis* MAYR, *ibid.*, p. 457.

*Typhlopone homalina* MAYR, *ibid.*, p. 457.

*Dorylus oraniensis* ERN. ANDRÉ, 1882, 'Spec. Hym. Europ. Algérie,' II, p. 252 (♀), Pl. xv, figs. 1-4.

*Typhlopone clausii* JOSEPH, 1882, Berlin. Ent. Zeitschr., XXVI, p. 47 (♀).

*Dorylus clausii* ERN. ANDRÉ, 1882, 'Spec. Hym. Europ. Algérie,' II, p. 252 (♀), Pl. xv, fig. 6.

*Dorylus fulvus* EMERY, 1895, Ann. Soc. Ent. France, LXIV, Bull., p. lxxiii, fig. (♀, ♂); 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 595 (♀, ♂). H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 42. R. GESTRO, in Vanutelli and Citeri, 1899, 'Seconda Spedizione Bottego. L'Omo,' p. 627, fig. 20 (♀, ♂). F. KOHL, 1907, Denkschr. Ak. Wiss. Wien, LXXI, p. 281 (♂). MAYR, 1907, Sitzb. Ak. Wiss. Wien, math. naturw. Kl., CXVI, Abt. 1, p. 387. ZAVATTARI, 1909, 'Il Ruwenzori, Parte Scientif.,' I, p. 212 (♂). FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 4 (♂). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 333 (♂).

*Dorylus fulvus fulvus* EMERY, 1919, Ann. Soc. Ent. Belgique, LIX, p. 102.

Type locality: unknown, "in saccharo detecta."

SENEGAMBIA: Thiès (F. Silvestri). CAMEROON: Mundame (Conradt). ANGLO-EGYPTIAN SUDAN: Khartum (F. Werner); Sennar. ABYSSINIA: Ogaden; Bela (Ruspoli); Lakes Bass Marle and Bass Narok (V. Bottego). SOMALILAND: Lugh (Ruspoli). ZANZIBAR: (Stuhlmann). SOUTHERN ARABIA: Makalla (O. Simony). SINAI PENINSULA. SYRIA. NORTH AFRICA. Doubtful record: Pretoria, TRANSVAAL (Wichgraf).

28a. Subsp. *badius* (GERSTÄCKER) EMERY, 1910, 'Gen. Insect., Dorylinae,' p. 13. STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exped. (1907-08),' III, p. 375 (♂). FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 362 (♂); 1913, Ann. Soc. Ent. Belgique, LVII, pp. 111 (♀, ♂) and 350 (♂); 1913, Rev. Zool. Afr., II, p. 312 (♂). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 63 (♀, ♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 125 (♀, ♂), Pl. iv, figs. 31, 31a, 32, 32a, and 32b. EMERY, 1919, Ann. Soc. Ent. Belgique, LIX, p. 102. WHEELER, 1921, Proc. American Ac. Arts Sci. Boston, LVI, p. 303, fig. 5a (♂).

*Dorylus badius* GERSTÄCKER, 1858, Monatsb. Ak. Wiss. Berlin, p. 261 (♂); in Peters, 1862, 'Reise n. Mossambique,' Zool., V, p. 499 (♂), Pl. xxxi, fig. 14. ROGER, 1863, 'Verzeich. Formicid.,' p. 41. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 408. GERSTÄCKER, 1872, Stettin. Ent. Zeitg., XXXIII, p. 257 (♀, ♂).

*Dorylus juvenculus* var. *badius* EMERY, 1894, Mem. Accad. Sc. Bologna, (5) IV, p. 112 (♂). FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 4 (♂).

*Dorylus (Typhlopone) fulvus* var. *badius* EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 709 and 724, figs. P and R (♀). MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 8 (♂). FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 52 (♂).

Type locality: MOZAMBIQUE (Peters).

GOLD COAST: Akra (Unger). BELGIAN CONGO: Kondué, Kasai (Luja); Lukula (Daniel); Kabambare (Flamand); Volcano region N. E. of Lake Kivu (Schubotz). RHODESIA: Bulawayo (G. Arnold). GERMAN SOUTHWEST AFRICA: Windhoek (Lübbert); Okahandja (Casper; Peters); Ontys (Langheld). BECHUANALAND: between Severelela and Khakhea (L. Schultze). CAPE PROVINCE: Cape Town (Wilms). MOZAMBIQUE: Inhambane (Fornasini). GERMAN EAST AFRICA: Tanga; New

Moschi, Mt. Kilimanjaro (Alluaud and Jeannel); Kibonoto, Kilimanjaro and Masai Steppe (Sjöstedt). BRITISH EAST AFRICA: Mt. Kenia, Meranga; Fort Hall, Nairobi; Mombasa Island (Alluaud and Jeannel). UGANDA: Unyoro Province near Hoima, east of Lake Albert (C. Alluaud); Lake Victoria (Zimmer); Entebbe (Duke of Abruzzi).

28a<sub>1</sub>. Var. **euross** EMERY, 1919, Ann. Soc. Ent. Belgique, LIX, p. 102.

*Dorylus fulvus* subsp. *euross* EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 5, figs. 1 and 2 (♀, ♂).

Type locality: Keren, ERITREA (F. Silvestri).

ERITREA: Ghinda; Nefasit (F. Silvestri).

28a<sub>2</sub>. Var. **obscurior** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 333 (♀). EMERY, 1919, Ann. Soc. Ent. Belgique, LIX, p. 102. See p. 49.

Type locality: Konakry, FRENCH GUINEA (F. Silvestri).

BELGIAN CONGO: Vankerekhovenville; Faradje; Garamba; Batama; Stanleyville (Lang and Chapin); Avakubi (Boyton).

28b. Subsp. **dentifrons** WASMANN, 1904, Zool. Jahrb. Abt. Syst., Suppl. VII, p. 674 (♀). EMERY, 1910, 'Gen. Insect., Dorylinæ,' p. 13 (♀); 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 5, fig. 1 (♀); 1919, Ann. Soc. Ent. Belgique, LIX, p. 102.

*Dorylus fulvus* var. *stramineus* STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 128 (♀, ♀).

Type locality: Sankuru, BELGIAN CONGO (E. Luja).

CAMEROON: (Zenker).

28c. Subsp. **glabratus** (SHUCKARD) EMERY, 1910, 'Gen. Insect., Dorylinæ,' p. 13 (♂).

*Dorylus glabratus* SHUCKARD, 1840, Ann. Nat. Hist., V, p. 317 (♂). WESTWOOD, 1842, 'Arcana Ent.,' I, p. 79 (♂). F. SMITH, 1859, 'Cat. Hym. Brit. Mus.,' VII, p. 2 (♂), Pl. I, fig. 8. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 408. RADOSZKOWSKY, 1876, Hor. Soc. Ent. Rossicæ, XII, p. 140. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 11. MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 200 (♂).

*Dorylus* (*Typhlopone*) *fulvus* ? var. *glabratus* EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 709 and 724.

Type locality: GAMBIA.

EGYPT. ZANZIBAR: (Stuhlmann).

28d. Subsp. **rhodesiæ** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 111 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 129 (♀). EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 5, fig. 1 (♀); 1919, Ann. Soc. Ent. Belgique, LIX, p. 102.

*Dorylus* (*Typhlopone*) *fulvus* subsp. *rhodesianus* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 333 (♀).

Type locality: Bulawayo, RHODESIA (G. Arnold).

TRANSVAAL: Pretoria (F. Silvestri).

#### Subgenus 4. **Rhogmus** SHUCKARD

*Rhogmus* SHUCKARD, 1840, Ann. Nat. Hist., V, p. 323.

*Dorylus* subg. *Rhogmus* EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 702 and 736; 1910, 'Gen. Insect., Dorylinæ,' p. 13.

Subgenotype: *Rhogmus fimbriatus* Shuckard, 1840.



29. **Dorylus (Rhogmus) fimbriatus** (SHUCKARD) EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 709 and 736, figs. AA and BB (♀, ♂); 1899, Ann. Mus. Civ. Genova, XXXIX, p. 499 (♂); 1901, Mem. Accad. Sc. Bologna, (5) IX, pp. 416, 419, and 428 (♀), Pl. I, figs. 31-38. FOREL, 1901, Mitt. Naturh. Mus. Hamburg, XVIII, p. 47 (♂). H. BRAUNS, 1903, Zeitschr. f. Hym. u. Dipt., III, pp. 294-298, fig. (♀). MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 8 (♂). FOREL, 1907, Mitt. Naturh. Mus. Hamburg, XXIV, p. 15 (♂); 1909, Ann. Soc. Ent. Belgique, LIII, pp. 52 and 71 (♂). EMERY, 1910, 'Gen. Insect., Dorylinae,' p. 14 (♀, ♀, ♂). FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 362 (♂). SANTSCHI, 1911, Rev. Zool. Afr., I, p. 207 (♀). STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08),' III, p. 375 (♂). FOREL, 1912, Ent. Mitt. Deutsch. Ent. Mus. Berlin, I, p. 81 (♂). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 333 (♀, ♂); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 65 (♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 129 (2, ♀, ♀, ♂), Pl. IV, figs. 36, 36a. SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 23 (♂).

*Rhogmus fimbriatus* SHUCKARD, 1840, Ann. Nat. Hist., V, p. 325 (♂). WESTWOOD, 1842, 'Arcana Ent.,' I, p. 80 (♂). F. SMITH, 1859, 'Cat. Hym. Brit. Mus.,' VII, p. 4 (♂), Pl. I, fig. 2. ROGER, 1863, 'Verzeich. Formicid.,' p. 42. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 453. GERSTAECKER, 1871, Arch. f. Naturg., XXXVII, 1, p. 355; 1873, in 'v. d. Decken's Reisen in Ostafrika, Gliederthiere,' p. 347 (♂). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 8. FOREL, 1904, Ann. Mus. Zool. Ac. Sc. St. Pétersbourg, VIII, (1903), p. 369 (♂).

*Dorylus fimbriatus* H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 42. MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicid.,' p. 2 (♀). BINGHAM, 1903, Ann. Mag. Nat. Hist., (7) XII, p. 61 (♂). POULTON, in A. J. Hayes, 1905, 'The Source of the Blue Nile,' p. 314 (♂).

Type locality: GAMBIA.

FRENCH GUINEA: Konakry; Mamou (F. Silvestri). GOLD COAST. CAMEROON. FRENCH CONGO: Gaboon. BELGIAN CONGO: Sankuru (Luja); Katanga (Lemaire). BENGUELA: Cucala (J. Cruchet). SOUTHERN RHODESIA: Salisbury (G. Marshall). NYASALAND: Fort Johnston (Rendall). GERMAN EAST AFRICA: Mpororo; Marangu (Zimmer); Tanga, Caves of Kulumuzi (Alluaud); Kibonoto, Mt. Kilimanjaro, 1000-1900 m. (Sjöstedt). ZANZIBAR: (v. d. Decken). BRITISH EAST AFRICA: Molo, Mau Escarpment, 2400 m.; Wambogo, Wa-Kikuyu, 1750 m.; Nairobi; Mt. Kenia, N'daika, 2200 m. (Alluaud and Jeannel). UGANDA: Unyoro Province, east of Lake Albert (C. Alluaud). ANGLO-EGYPTIAN SUDAN: Kaka, White Nile (I. Trägårdh); Lake Tsano (A. J. Hayes). SOMALILAND. ABYSSINIA: Buditu to Dimé (V. Bottego); Adis-Abeba (Kachovskij).

29<sub>1</sub>. Var. **crampeli** SANTSCHI, 1919, Rev. Zool. Afr., VI, pp. 231 and 232 (♂). Type locality: Fort Crampel, FRENCH CONGO.

29<sub>2</sub>. Var. **laevipodex** SANTSCHI, 1919, Rev. Zool. Afr., VI, pp. 231 and 232 (♂). Type locality: BRITISH EAST AFRICA.

29<sub>3</sub>. Var. **poweri** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 217 (♀). Type locality: Kimberley, CAPE COLONY (Power).

30. **Dorylus (Rhogmus) fuscipennis** EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 709 and 737, figs. CC and DD (♂); 1901, Mem. Accad. Sc. Bologna, (5) IX, pp. 416 and 428 (♀); 1910, 'Gen. Insect., Dorylinae,' p. 14 (♂). FOREL, 1910, Notes Leyden Mus., XXXI, p. 224, footnote (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 349 (♀). SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 231 (♂).

*Rhogmus fuscipennis* EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), p. 570 (♂). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 8.

Type locality: WEST AFRICA.

Haitifi. GOLD COAST: Aburi (Fisch). FRENCH CONGO: Ogowé (Mocquerys).

30. Var. **lugubris** SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 231 (♂); 1919, *ibid.*, VII, p. 91.

*Dorylus (Rhogmus) fimbriatus* var. *lugubris* SANTSCHI, 1919, *ibid.*, VI, p. 232 (♂).

Type locality: Aburi, GOLD COAST (Fisch).

30a. Var. **marginiventris** SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 231 (♂); 1919, *ibid.*, VII, p. 91.

*Dorylus (Rhogmus) fimbriatus* var. *marginiventris* SANTSCHI, 1919, *ibid.*, VI, p. 233 (♂).

Type locality: Dimbroko, IVORY COAST (Le Moul't).

31. **Dorylus (Rhogmus) leo** SANTSCHI, 1919, Rev. Zool. Afr., VI, pp. 231 and 232 (♂).

Type locality: Dimbroko, IVORY COAST.

32. **Dorylus (Rhogmus) ocellatus** (STITZ).

*Dichthadia* sp. STITZ, 1909, Zool. Anzeiger, XXXV, p. 231, figs. 1-3 (♀).

WASMANN, 1911, Rev. Zool. Afr., I, p. 113.

*Dichthadia ocellata* STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 128 (♀).

Type locality: Bipindi, CAMEROON (Zenker).

33. **Dorylus (Rhogmus) savagei** EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 709 and 738, figs. EE and FF (♂). FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 52 (♂). EMERY, 1910, 'Gen. Insect., Dorylinae,' p. 14 (♂). FOREL, 1911, Rev. Zool. Afr., I, p. 275 (♂); 1913, Ann. Soc. Ent. Belgique, LVII, p. 348 (♂). SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 231 (♂).

*Rhogmus fuscipennis* ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 5 (♂) (*nec* Emery).

Type locality: Gaboon, FRENCH CONGO.

BELGIAN CONGO: Lukula (Daniel); Mayombe (Deleval); Tshoa (Cabra).

33a. Var. **mucronatus** EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 462 (♂); 1910, 'Gen. Insect., Dorylinae,' p. 14 (♂). SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 231 (♂).

*Dorylus (Rhogmus) savagei* subsp. *mucronatus* FOREL, 1901, Mitt. Naturh. Mus. Hamburg, XVIII, p. 47 (♂).

Type locality: Lagos, NIGERIA.

NIGERIA: Wari, Forcados River (Henry Fischer).

34. **Dorylus (Rhogmus) termitarius** WASMANN, 1911, Rev. Zool. Afr., I, p. 111 (♀, ♀), Pl. I, fig. 4.

Type locality: Romée near Stanleyville, BELGIAN CONGO (H. Kohl).

#### Subgenus 5. **Alaopone** EMERY

*Alaopone* EMERY (part), 1881, Ann. Mus. Civ. Genova, XVI, p. 274.

*Dorylus* subg. *Alaopone* EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 702 and 730; 1910, 'Gen. Insect., Dorylinae,' p. 14.

*Dorylus* subg. *Shuckardia* (part) EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 703 and 740.

Subgenotype: *Alaopone oberthüri* Emery, 1881 = *Dorylus orientalis* Westwood, 1835.

35. *Dorylus (Alaopone) atriceps* SHUCKARD. EMERY, 1910, 'Gen. Insect., Dorylinae,' p. 15 (♂). SANTSCHI, 1920, Ann. Soc. Ent. France, LXXXVIII, (1919), p. 362 (♂). See p. 51.

*Dorylus atriceps* SHUCKARD, 1840, Ann. Nat. Hist., V, p. 323 (♂). WESTWOOD, 1842, 'Arcana Ent.,' I, p. 80 (♂). F. SMITH, 1859, 'Cat. Hym. Brit. Mus.,' VII, p. 4 (♂), Pl. I, fig. 14. ROGER, 1863, 'Verzeich. Formicid.,' p. 41. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 408. RADOSZKOWSKY, 1881, Jorn. Sci. Ac. Lisboa, VIII, No. 31, p. 198. ERN. ANDRÉ, 1886, 'Spec. Hym. Europ. Algérie,' II, p. 840 (♂). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 10. ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 5 (♂).

*Dorylus shuckardi* RITSEMA, 1874, Tijdschr. v. Ent., XVII, p. 182 (♂).

*Dorylus ritsemæ* DALLA TORRE, 1892, Wien. Ent. Zeitg., XI, p. 89 (♂).

*Dorylus atriceps* var. *shuckardii* DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 10.

*Dorylus (Shuckardia) atriceps* EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 710 and 740, figs. HH and GG (♂). FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 53 (♂).

Type locality: Gambia River, GAMBIA.

SENEGAMBIA. GUINEA. IVORY COAST: Dimbroko (Le Moul't). FRENCH CONGO: Ogowe (Mocquerys). BELGIAN CONGO: Vivi; Chikai (Cabra); Faradje; Stanleyville (Lang and Chapin). ANGOLA: (Welwitsch). ABYSSINIA. TUNIS.

35i. Var. *katanensis* STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08),' III, p. 375 (♂).

Type locality: Plain south of Lake Albert Edward, BELGIAN CONGO (Schubotz).

35a. Subsp. *æthiopicus* EMERY. FOREL, 1907, Ann. Soc. Ent. Belgique, LI, p. 201 (♀). EMERY, 1910, 'Gen. Insect., Dorylinae,' p. 15 (♀, ♂).

*Dorylus atriceps* EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 381 (♂) (*nec* Shuckard).

*Dorylus (Shuckardia) atriceps* subsp. *æthiopicus* EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 710 and 741, figs. JJ and KK (♂). SANTSCHI, 1907, Rev. Suisse Zool., XV, p. 327 (♀).

Type locality: Sudan.

ERITREA: Anseba (Beccari). TUNIS: Kairouan (F. Santschi).

36. *Dorylus (Alaopone) attenuatus* SHUCKARD. EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 709 and 733, figs. X, Y (♂); 1910, 'Gen. Insect., Dorylinae,' p. 15 (♂). FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 4 (♂); 1913, Rev. Zool. Afr., II, p. 312 (♂). ARNOLD, 1915, (misspelled *attenatus*) Ann. South African Mus., XIV, p. 133 (♂).

*Dorylus attenuatus* SHUCKARD, 1840, Ann. Nat. Hist., V, p. 322 (♂). WESTWOOD, 1842, 'Arcana Ent.,' I, p. 80 (♂). F. SMITH, 1859, 'Cat. Hym. Brit. Mus.,' VII, p. 3 (♂), Pl. I, fig. 13. ROGER, 1863, 'Verzeich. Formicid.,' p. 41. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 408. RADOSZKOWSKY, 1876, Hor. Soc. Ent. Rossicæ, XII, p. 140. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 10. BINGHAM, 1903, Ann. Mag. Nat. Hist., (7) XII, p. 61 (♂).

Type locality: Gambia River, GAMBIA.

BELGIAN CONGO: Valley of the Lubumbashi (Buttgenbach). GERMAN SOUTH-WEST AFRICA: (Lübbert). BECHUANALAND: Lobatsi, north of Mafeking (L. Schultze). CAPE PROVINCE: Cape of Good Hope. TRANSVAAL: Pretoria (Distant). ABYSSINIA: (Raffray).

361. Var. **acuminatus** EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 462 (♂). MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 8 (♂). EMERY, 1910, 'Gen. Insect., Dorylinæ,' p. 15 (♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 133 (♂).

Type locality: ORANGE FREE STATE.

GERMAN EAST AFRICA: Kibonoto, Mt. Kilimanjaro, 1000-1200 m. (Sjöstedt).

362. Var. **umbratipennis** FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 52 (♂). EMERY, 1910, 'Gen. Insect., Dorylinæ,' p. 15 (♂).

Type locality: Nini (? probably Vivi, BELGIAN CONGO).

36a. Subsp. **latinodis** FOREL, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 479 (♂).

Type locality: Stanleyville, BELGIAN CONGO (H. Kohl).

37. **Dorylus (Alaopone) buyssoni** SANTSCHI, 1910, Rev. Suisse Zool., XVIII, p. 748, figs. 7a, b, d, and e (♂); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 65 (♂).

Type locality: Nairobi, Wa-Kikuyu, BRITISH EAST AFRICA (C. Alluaud).

BRITISH EAST AFRICA: Cheteni (Alluaud and Jeannel).

371. Var. **conjugens** SANTSCHI, 1910, Rev. Suisse Zool., XVIII, p. 750, figs. 7c and f (♂); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 65 (♂).

Type locality: Mombasa, Athi Plains, BRITISH EAST AFRICA (Fernique).

BRITISH EAST AFRICA: Mwatate, Wa-Taita Province (C. Alluaud).

38. **Dorylus (Alaopone) conradti** EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 707 and 734, fig. Z (♀, ♀), Pl. xvi, figs. 1-4, and Pl. xvii, figs. 7-10; 1901, Mem. Accad. Sc. Bologna, (5) IX, p. 428 (♀); 1910, 'Gen. Insect., Dorylinæ,' p. 15 (♀, ♀). WASMANN, 1918, Ent. Mitt. Deutsch. Ent. Mus. Berlin, VII, p. 136. See p. 51.

Type locality: Bismarckburg, Togo (Conradt).

CAMEROON: Soppo (v. Rothkirch). BELGIAN CONGO: Niangara (Lang and Chapin).

39. **Dorylus (Alaopone) diadema** GERSTAECKER. EMERY, 1910, 'Gen. Insect., Dorylinæ,' p. 15 (♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 134 (♂).

*Dorylus diadema* GERSTAECKER, 1858, Monatsb. Ak. Wiss. Berlin, p. 261 (♂); in Peters, 1862, 'Reise n. Mossambique, Zool.,' V, p. 500 (♂), Pl. xxxi, fig. 15. ROGER, 1863, 'Verzeich. Formicid.,' p. 41. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 408. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 10. FOREL, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 309 (♂).

*Dorylus (Shuckardia) diadema* EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 710 and 742, figs. MM and LL (♂).

Type locality: Tete, MOZAMBIQUE (Peters).

391. Var. **fusciceps** EMERY, 1910, 'Gen. Insect., Dorylinæ,' p. 15 (♂).

*Dorylus (Shuckardia) diadema* var. *fusciceps* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 463 (♂).

Type locality: Lake Nyasa.

Congo.

39a. Subsp. **arnoldi** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 216 (♂).

Type locality: Bulawayo, RHODESIA (G. Arnold).

40. **Dorylus (Alaopone) distinctus** SANTSCHI, 1910, Rev. Suisse Zool., XVIII, p. 747, fig. 6 (♂).

Type locality: FRENCH GUINEA (Marchand).

41. **Dorylus (Alaopone) montanus** SANTSCHI, 1910, Rev. Suisse Zool., XVIII, p. 750, fig. 8 (♂); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 66 (♀).

Type locality: Kibosho, Mt. Kilimanjaro, 1400 m., GERMAN EAST AFRICA (C. Alluaud).

GERMAN EAST AFRICA: New Moschi, 800 m.; Kilema, 1440 m. (Alluaud and Jeannel).

41i. Var. **bondroiti** SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, p. 162 (♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 135 (♂).

*Dorylus (Alaopone) montanus* subsp. *bondroiti* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 248 (♂).

Type locality: TRANSVAAL.

CAPE PROVINCE: Steynsburg (Ellenberger).

41a. Subsp. **australis** SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 231 (♀).

*Dorylus (Alaopone) australis* SANTSCHI, 1920, Ann. Soc. Ent. France, LXXXVIII, (1919), p. 362 (♀).

Type locality: Majuba, Herschel District, CAPE PROVINCE (G. Arnold).

41b. Subsp. **brevis** SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 245, fig. 1 (♂).

Type locality: Wombali, BELGIAN CONGO (Vanderyst).

### Ecitonini Forel

#### **Enictogiton** EMERY

*Enictogiton* EMERY, 1901, Bull. Soc. Ent. Italiana, XXXIII, p. 49; 1910, 'Gen. Insect., Dorylinae,' p. 27.

Genotype: *Enictogiton fossiceps* Emery, 1901.

1. **Enictogiton bequaerti** FOREL, 1913, Rev. Zool. Afr., II, p. 314 (♂).

Type locality: Sankisia, BELGIAN CONGO (J. Bequaert).

2. **Enictogiton elongatus** (SANTSCHI).

*Enictogiton elongatus* SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 246, fig. 2c (♂).

Type locality: Malela, BELGIAN CONGO (Burgeon).

2i. Var. **attenuatus** SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 247, fig. 2b (♂).

Type locality: 300 km. south of Kindu, BELGIAN CONGO (Burgeon).

3. **Enictogiton emeryi** FOREL, 1913, Rev. Zool. Afr., II, p. 315 (♂).

Type locality: Valley of the Lubumbashi, BELGIAN CONGO (Buttgenbach).

4. **Enictogiton fossiceps** EMERY, 1901, Bull. Soc. Ent. Italiana, XXXIII, p. 49, figs. 3 and 4 (♂); 1910, 'Gen. Insect., Dorylinae,' p. 28 (♂).

Type locality: Congo.

5. **Enictogiton sulcatus** (SANTSCHI).

*Enictogiton sulcatus* SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 247, fig. 2a (♂).

Type locality: Katiki, BELGIAN CONGO (Gérard).

***Ænictus* SHUCKARD<sup>1</sup>**

*Ænictus* SHUCKARD, 1840, Ann. Nat. Hist., V, p. 266 (♂). EMERY, 1910, 'Gen. Insect., Dorylinæ,' p. 28.

*Typhlatta* F. SMITH, 1858, Journ. Linn. Soc. London, Zool., II, p. 79 (♀).

*Eciton* (part) F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 153.

*Alaopone* (part) ERN. ANDRÉ, 1886, 'Spec. Hym. Europ. Algérie,' II, p. 854.

*Dorylus* subg. *Shuckardia* (part) EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, pp. 703 and 740.

Genotype: *Ænictus ambiguus* Shuckard, 1840.

1. *Ænictus asperivalvus* SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 233 (♂); 1920, Ann. Soc. Ent. France, LXXXVIII, (1919), p. 373, fig. 10 (♂).

Type locality: Dimbroko, IVORY COAST (Le Moult).

2. *Ænictus batesi* FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 255 (♀).

Type locality: Old Calabar, NIGERIA (Bates).

3. *Ænictus bottegoides* EMERY, 1899, Ann. Mus. Civ. Genova, XXXIX, p. 499, fig. (♂); 1910, 'Gen. Insect., Dorylinæ,' p. 31 (♂).

Type locality: Lake Bass Narok, ABYSSINIA (V. Bottego).

3a. Var. *alluaudi* SANTSCHI, 1910, Rev. Suisse Zool., XVIII, p. 754, fig. 10 (♂); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 67 (♂).

Type locality: Kisumu, Victoria Nyanza, BRITISH EAST AFRICA (C. Alluaud).

BRITISH EAST AFRICA: Nairobi, Wa-Kikuyu; Athi Basin, Ndarugo River (C. Alluaud).

3a. Subsp. *anceps* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 249 (♂).

*Ænictus anceps* SANTSCHI, 1920, Ann. Soc. Ent. France, LXXXVIII, (1919), p. 374, fig. 11 (♂).

Type locality: Nefasit, ERITREA (K. Escherich).

ERITREA: Ghinda (K. Escherich).

3b. Subsp. *noctivagus* SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 303, fig. 1 (♂).

Type locality: ABYSSINIA.

4. *Ænictus buttgenbachi* FOREL, 1913, Rev. Zool. Afr., II, p. 313 (♂). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 68 (♀, ♂).

Type locality: Valley of the Lubumbashi, BELGIAN CONGO (Buttgenbach).

GERMAN EAST AFRICA: Kilema, Mt. Kilimanjaro, 1440 m.; New Moschi, 800 m. (Alluaud and Jeannel).

5. *Ænictus congolensis* SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), p. 277 (♀, ♀), Pl. I.

*Ænictus rixator* var. *congolensis* SANTSCHI, 1911, Rev. Zool. Afr., I, p. 207 (♀).

Type locality: FRENCH CONGO (A. Weiss).

FRENCH CONGO: Lambarene (F. Faure).

6. *Ænictus crucifer* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 68, fig. 5 (♂).

Type locality: Tiwi, BRITISH EAST AFRICA (Alluaud and Jeannel).

7. *Ænictus decolor* (MAYR) DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 7. EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, p. 746 (♀); 1910, 'Gen. Insect., Dorylinæ,' p. 31 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 143 (♀).

<sup>1</sup>*Ænictus unicolor* "Smith," recorded from Angola (Welwitsch) by Radoszkowsky, Journ. Sci. Ac. Lisboa, VIII, No. 31, 1881, p. 198, has apparently never been described.

*Typhlatta decolor* MAYR, 1878, Verh. Zool. Bot. Ges. Wien, XXVIII, p. 668 (♀).  
Type locality: East Africa.

8. *Enictus eugenii* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 17 (♀), Pl. II, figs. 1-4; 1895, Zool. Jahrb. Abt. Syst., VIII, p. 747 (♀). WASMANN, 1900, ibid., XIV, pp. 268 and 275. H. BRAUNS, 1901, Zeitschr. f. Hym. u. Dipt., I, p. 17. WASMANN, 1904, Zool. Jahrb. Abt. Syst., Suppl. VII, p. 676. EMERY, 1910, 'Gen. Insect., Dorylinæ,' p. 31 (♀). FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 255 (♀). WASMANN, 1915, Ent. Mitt. Deutsch. Ent. Mus. Berlin, IV, pp. 28 and 203.

*Enictus eugeniae* ARNOLD, 1915, Ann. South African Mus., XIV, p. 139 (♀), Pl. IV, fig. 38.

Type locality: Makapan, TRANSVAAL (E. Simon).

ORANGE FREE STATE: Bothaville (H. Brauns). SOUTHERN RHODESIA: Bulawayo (G. Arnold).

8<sub>1</sub>. Var. *brazzai* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 355 (♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

8a. Subsp. *caroli* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 248 (♀). EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 3 (♀).

Type locality: Nefasit, ERITREA (K. Escherich).

ERITREA: Ghinda (F. Silvestri).

9. *Enictus foreli* SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 234 (♂); 1920, Ann. Soc. Ent. France, LXXXVIII, (1919), p. 369 (♂).

Type locality: Dimbroko, IVORY COAST (Le Moul't).

10. *Enictus furculatus* SANTSCHI, 1919, Rev. Zool. Afr., VII, p. 91; 1920, Ann. Soc. Ent. France, LXXXVIII, (1919), p. 373, fig. 10 (♂).

*Enictus furculatus* SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 233 (♂).

Type locality: Saint Louis, SENEGAMBIA (Le Moul't).

11. *Enictus fuscovarius* GERSTAECKER, 1858, Monatsb. Ak. Wiss. Berlin, p. 262 (♂); in Peters, 1862, 'Reise n. Mossambique, Zool.,' V, p. 501 (♂), Pl. xxxii, fig. 1. ROGER, 1863, 'Verzeich. Formicid.,' p. 41. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 394. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 7. EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, p. 747 (♂); 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 597 (♂). FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 249 (♂). EMERY, 1910, 'Gen. Insect., Dorylinæ,' p. 31 (♂). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 350 (♂). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 67 (♂).

Type locality: Tete, MOZAMBIQUE (Peters).

BELGIAN CONGO: Sampwe (J. Bequaert). BRITISH EAST AFRICA: Voi, Taita, 600 m.; Taveta, 750 m.; Landjoro, Pori, 900 m. (Alluaud and Jeannel). ABYSSINIA: Ganale; Lake Abaja; Bela; Magala Re Umberto; Webi (Ruspoli). ERITREA: Ghinda (K. Escherich).

11<sub>1</sub>. Var. *magretti* EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, p. 747 (♂). MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicid.,' p. 2 (♂); 1907, Sitzb. Ak. Wiss. Wien, math. naturw. Kl., CXVI, Abt. I, p. 387. EMERY, 1910, 'Gen. Insect., Dorylinæ,' p. 31. SANTSCHI, 1910, Rev. Suisse Zool., XVIII, p. 756 (♂); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 67 (♂).

*Enictus inconspicuus* MAGRETTI, 1884, Ann. Mus. Civ. Genova, XXI, p. 539 (♂) (*nec* Westwood); 1884, Bull. Soc. Ent. Italiana, XV, (1883) p. 244 (♂).

*Enictus magretti* EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), p. 569 (♂), Pl. xv, figs. 13, 14; 1892, Ann. Mus. Civ. Genova, XXXII, p. 110, fig. (♂). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 8.

Type locality: ANGLO-EGYPTIAN SUDAN (Magretti).

SENEGAMBIA: Gorée Island (H. Brauns). BRITISH EAST AFRICA: Taveta; Bura, Wa-Taita Province (Alluaud and Jeannel). SOMALILAND: Errer-es-Saghir (Bricchetti-Robecchi). ABYSSINIA: Diré Daa; Bazen (Magretti). ERITREA: Sogodas (Magretti). ANGLO-EGYPTIAN SUDAN: White Nile (I. Trägårdh); Khartum (F. Werner); Kor Guillo; Bahr-el-Salaam; El Hefera (Magretti).

12. *Enictus hamifer* EMERY, 1896, Ann. Mus. Civ. Genova, XXXVII, p. 153, fig. (♂); 1910, 'Gen. Insect., Dorylinae,' p. 31 (♂). FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 250 (♂); 1912, Ent. Mitt. Deutsch. Ent. Mus. Berlin, I, p. 81 (♂). SANTSCHI, 1910, Rev. Suisse Zool., XVIII, p. 756 (♂).

Type locality: Maddo Wells, BRITISH EAST AFRICA (V. Bottego).

ABYSSINIA: Confluence of the Webi and Ganale Rivers (V. Bottego); Diré Daa (Magretti). ERITREA: Ghinda (K. Escherich). BRITISH EAST AFRICA.

13. *Enictus humeralis* SANTSCHI, 1910, Rev. Suisse Zool., XVIII, p. 752, figs. 9a-e (♂).

Type locality: Bamako, FRENCH SUDAN (Chevalier).

131. Var. *chevalieri* SANTSCHI, 1910, Rev. Suisse Zool., XVIII, p. 754 (♂).

Type locality: CASAMANCE (Chevalier).

132. Var. *viridans* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 248 (♂).

Type locality: Kouandé, UPPER DAHOMEY (Desanti).

14. *Enictus inconspicuus* WESTWOOD, 1847, Trans. Ent. Soc. London, IV, p. 238 (♂), Pl. xiv, fig. 4. F. SMITH, 1859, 'Cat. Hym. Brit. Mus.,' VII, p. 10 (♂), Pl. II, figs. 15a-c. ROGER, 1863, 'Verzeich. Formicid.,' p. 41. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 394. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 8. EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, p. 747 (♂); 1910, 'Gen. Insect., Dorylinae,' p. 31 (♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 141 (♂).

Type locality: South Africa (Drège).

15. *Enictus luteus* EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), p. 568 (♂), Pl. xv, figs. 11 and 12. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 8. EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, p. 747 (♂); 1910, 'Gen. Insect., Dorylinae,' p. 32 (♂). SANTSCHI, 1920, Ann. Soc. Ent. France, LXXXVIII, (1919), p. 373 (♂).

Type locality: SIERRA LEONE.

IVORY COAST: Dimbroko (Le Mout).

16. *Enictus mariæ* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 18 (♀), Pl. II, figs. 5-7; 1895, Zool. Jahrb. Abt. Syst., VIII, p. 747 (♀); 1910, 'Gen. Insect., Dorylinae,' p. 31 (♀). FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 212 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 140 (♀).

Type locality: Makapan, TRANSVAAL (E. Simon).

RHODESIA: Bulawayo (G. Arnold).

161. Var. *natalensis* FOREL, in Emery, 1901, Bull. Soc. Ent. Italiana, XXXIII, p. 49 (♀). EMERY, 1910, 'Gen. Insect., Dorylinae,' p. 31 (♀). SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 14 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 141 (♀).

Type locality: NATAL (Haviland).

ZULULAND: Dukudu (I. Trägårdh).



17. *Ænictus möbbii* EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, p. 747, fig. NN (♂); 1910, 'Gen. Insect., Dorylinae,' p. 32 (♂).  
*Ænictus mæbii* SANTSCHI, 1920, Ann. Soc. Ent. France, LXXXVIII, (1919), p. 269, fig. 6 (♂).  
 Type locality: Bismarckburg, Togo (Büttner).  
 IVORY COAST: Dimbroko (Le Moul't).
- 17a. Subsp. *mutatus* SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 304, fig. 2 (♂).  
*Ænictus mæbii* var. SANTSCHI, 1910, Rev. Suisse Zool., XVIII, p. 754 (♂).  
*Ænictus mutatus* SANTSCHI, 1920, Ann. Soc. Ent. France, LXXXVIII, (1919), p. 370, fig. 7 (♂).  
 Type locality: IVORY COAST (Delafosse).  
 IVORY COAST: Dimbroko (Le Moul't). DAHOMEY: Kouandé (Desanti).
- 17b. Subsp. *pudicus* (SANTSCHI).  
*Ænictus mutatus* subsp. *pudicus* SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 234 (♂); 1920, Ann. Soc. Ent. France, LXXXVIII, (1919), p. 371, fig. 8 (♂).  
 Type locality: Dimbroko, IVORY COAST (Le Moul't).
- 17c. Subsp. *sankisianus* FOREL, 1913, Rev. Zool. Afr., II, p. 312 (♂).  
 Type locality: Sankisia, BELGIAN CONGO (J. Bequaert).
18. *Ænictus raptor* FOREL, 1913, Rev. Zool. Afr., II, p. 314 (♂).  
 Type locality: Lubumbashi Valley, BELGIAN CONGO (Buttgenbach).
19. *Ænictus rixator* FOREL, in Emery, 1901, Bull. Soc. Ent. Italiana, XXXIII, p. 48 (♀). EMERY, 1910, 'Gen. Insect., Dorylinae,' p. 31 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 137 (♀).  
 Type locality: NATAL (R. C. Wroughton).
20. *Ænictus rotundatus* MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 1 (♀). EMERY, 1910, 'Gen. Insect., Dorylinae,' p. 31 (♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 112 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 138 (♀), Pl. iv, fig. 37.  
 Type locality: Port Elizabeth, CAPE PROVINCE (H. Brauns).  
 RHODESIA: Bulawayo (G. Arnold).
21. *Ænictus soudanicus* SANTSCHI, 1910, Rev. Suisse Zool., XVIII, p. 758, fig. 12 (♂); 1913, Ann. Soc. Ent. Belgique, LVII, p. 304 (♀).  
 Type locality: Toukola, SUDAN (Conan).  
 SENEGAMBIA: St. Louis (Claveau).
21. Var. *brunneus* FOREL, 1913, Rev. Zool. Afr., II, p. 313 (♂).  
 Type locality: Sankisia, BELGIAN CONGO (J. Bequaert).
22. *Ænictus steindachneri* MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 2 (♀). EMERY, 1910, 'Gen. Insect., Dorylinae,' p. 31 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 69 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 139 (♀).  
 Type locality: Reddersburg, ORANGE FREE STATE (H. Brauns).  
 BRITISH EAST AFRICA: Mbuyuni, Pori, 1110 m. (Alluaud and Jeannel).
23. *Ænictus togoënsis* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 248 (♂); 1920, ibid., LXXXVIII, (1919), p. 375, fig. 12 (♂).  
 Type locality: Togo.  
 IVORY COAST: Dimbroko (Le Moul't).

24. *Enictus tuberculatus* ARNOLD, 1915, Ann. South African Mus., XIV, p. 142 (♂).

Type locality: Bulawayo, SOUTHERN RHODESIA (G. Arnold).

25. *Enictus weissi* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 354, fig. 2 (♀). FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 212 (♀). SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 9 (♀).

Type locality: Gomba, FRENCH CONGO (A. Weiss).

CAMEROON: Grand Batanga (G. Schwab). FRENCH CONGO: Samkita (F. Faure).

### CERAPACHYINÆ Forel

#### Cerapachyini Forel

#### Sphinctomyrmex MAYR

*Sphinctomyrmex* MAYR, 1866, Verh. Zool. Bot. Ges. Wien, XVI, p. 895. EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 7.

*Cerapachys* (part) FOREL, in Grandidier, 1892, 'Hist. Phys. Nat. Madagascar,' XX, 2, p. 243.

Genotype: *Sphinctomyrmex stali* Mayr, 1866.

The two following African forms are probably not true members of this genus; being described from the male alone they cannot be properly classified, since no male of the genus is known with certainty.

1. *Sphinctomyrmex rufiventris* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 244, fig. 1 (♂).

Type locality: Djougou, Kouandé, UPPER DAHOMEY (Desanti).

UPPER DAHOMEY: Kika (Ribot). FRENCH SUDAN: Sikosso (Chevalier).

- 1a. Subsp. *chariensis* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 245 (♂).

Type locality: Fort Archambault, FRENCH EQUATORIAL AFRICA (Decorse).

#### Cerapachys F. SMITH

*Cerapachys* F. SMITH, 1858, Journ. Linn. Soc. London, Zool., II, p. 74. EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 8.

*Ceratopachys* W. A. SCHULZ, 1906, 'Spolia Hymenopterologica,' p. 155.

Genotype: *Cerapachys antennatus* F. Smith, 1858.

The African species all belong to the subgenus *Cerapachys*, *sensu stricto*.

1. *Cerapachys afer* FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 9 (♀, ♀). EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 9.

Type locality: Mto-ya-Kifaru, Arusha-chini, GERMAN EAST AFRICA (Katona).

2. *Cerapachys arnoldi* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 211 (♀).

Type locality: CAPE COLONY.

3. *Cerapachys cooperi* ARNOLD, 1915, Ann. South African Mus., XIV, p. 14 (♀, ♀).

Type locality: Umgeni, Durban, NATAL (C. B. Cooper).

4. *Cerapachys cribrinodis* EMERY, 1902, Rend. Accad. Sc. Bologna, N. S., VI, p. 24; 1911, 'Gen. Insect., Ponerinæ,' p. 9 (♀). FOREL, 1913, Rev. Suisse Zool., XXI, p. 667 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 12 (♀). See p. 53.

*Parasyscia cribrinodis* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 463, fig. (♂). STRIZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 128 (♂).

Type locality: CAMEROON (Conradt).

CAMEROON: Johann-Albrechtshöhe (Conradt). BELGIAN CONGO: Medje (Lang and Chapin).

4. Var. *natalensis* FOREL, 1901, Rev. Suisse Zool., IX, p. 335 (♂); 1910, Ann. Soc. Ent. Belgique, LIV, p. 423 (♂). EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 9. FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 211 (♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 13 (♂).

Type locality: NATAL (Haviland).

NATAL: Estcourt (R. C. Wroughton).

5. *Cerapachys peringueyi* EMERY, 1902, Rend. Accad. Sc. Bologna, N. S., VI, p. 24; 1911, 'Gen. Insect., Ponerinæ,' p. 9, Pl. I, fig. 2. ARNOLD, 1915, Ann. South African Mus., XIV, p. 13 (♂), Pl. I, figs. 1, 1a.

*Parasyscia peringueyi* EMERY, 1886, Bull. Soc. Ent. Italiana, XVIII, p. 360 (♂, ♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 17. EMERY, 1895, Zool. Jahrb. Abt. Syst., VIII, p. 757, fig. PP (♂, ♀).

Type locality: Cape of Good Hope (L. Péringuey).

TRANSVAAL.

5i. Var. *latiuscula* EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 9. ARNOLD, 1915, Ann. South African Mus., XIV, p. 14 (♂).

*Parasyscia peringueyi* var. *latiuscula* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 19 (♂).

Type locality: Makapan, TRANSVAAL (E. Simon).

6. *Cerapachys roberti* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 212 (♂).

Type locality: Estcourt, NATAL (R. C. Wroughton).

7. *Cerapachys wroughtoni* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 422 (♂). EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 9 (♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 16 (♂).

Type locality: Mountains of NATAL (R. C. WROUGHTON).

7i. Var. *rhodesiana* FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 212 (♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 16 (♂).

Type locality: Bulawayo, SOUTHERN RHODESIA (G. Arnold).

### Phyracaces EMERY

*Phyracaces* EMERY, 1902, Rend. Accad. Sc. Bologna, N. S., VI, p. 23; 1911, 'Gen. Insect., Ponerinæ,' p. 10.

*Cerapachys* (part) FOREL, in Grandidier, 1892, 'Hist. Phys. Nat. Madagascar,' XX, 2, p. 243.

Genotype: *Cerapachys mayri* Forel, 1892.

1. *Phyracaces braunsi* EMERY, 1902, Rend. Accad. Sc. Bologna, N. S., VI, p. 27 (♂); 1911, 'Gen. Insect., Ponerinæ,' p. 11 (♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 17 (♂).

Type locality: Willowmore, CAPE PROVINCE (H. Brauns).

2. *Phyracaces cooperi* ARNOLD, 1915, Ann. South African Mus., XIV, p. 18 (♂).

Type locality: Umgeni, Durban, NATAL (C. B. Cooper).

2a. Subsp. **congolensis** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 401 (♀).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

3. **Phyracaces foreli** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 309 (♀); 1915, (part) Ann. Soc. Ent. France, LXXXIV, p. 245 (♀), fig. 2b (nec ♀, fig. 2a).

Type locality: Aburi, GOLD COAST (F. Silvestri).

4. **Phyracaces langi** WM. M. WHEELER. See p. 54 (♀, ♀).

Type locality: Lubila, BELGIAN CONGO (Lang and Chapin).

5. **Phyracaces nkomoensis** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 400 (♀).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

6. **Phyracaces santschii** WM. M. WHEELER. See p. 56 (♀).

*Phyracaces foreli* (part) SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 245 (♀), fig. 2a (nec ♀, fig. 2b).

Type locality: Samkita, FRENCH CONGO (F. Faure).

### **Lioponera** MAYR

*Lioponera* MAYR, 1878, Verh. Zool. Bot. Ges. Wien, XXVIII, p. 666. EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 11.

*Cerapachys* subg. *Lioponera* FOREL, in Grandidier, 1892, 'Hist. Phys. Nat. Madagascar,' XX, 2, p. 244.

Genotype: *Lioponera longitarsus* Mayr, 1878.

The Ethiopian and North African species being described only from the male, it is very doubtful whether the genus really occurs in those regions.

1. **Lioponera decorsei** SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, p. 150 (♂).

Type locality: Krebedje, southern Darbanda, FRENCH CONGO (Decorse).

2. **Lioponera nigra** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 46 (♂).

Type locality: Molo, Mau Escarpment, 2420 m., BRITISH EAST AFRICA (Alluaud and Jeannel).

### **PONERINÆ** Lepeletier

#### **Cylindromyrmicini** Emery

##### **Simopone** FOREL

*Simopone* FOREL, in Grandidier, 1891, 'Hist. Phys. Nat. Madagascar,' XX, 2, p. 139. EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 15.

*Cerapachys* subg. *Simopone* FOREL, in Grandidier, 1892, 'Hist. Phys. Nat. Madagascar,' XX, 2, p. 249.

Genotype: *Simopone grandidieri* Forel, 1891.

1. **Simopone conradti** EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 475 (♀); 1911, 'Gen. Insect., Ponerinae,' p. 16 (♀), Pl. I, fig. 7.

Type locality: CAMEROON (Conradt).

2. **Simopone marleyi** ARNOLD, 1915, Ann. South African Mus., XIV, p. 20 (♀).

Type locality: Stella Bush, Durban, NATAL (Marley).

**Amblyoponini Forel****Mystrium ROGER**

*Mystrium* ROGER, 1862, Berlin. Ent. Zeitschr., VI, p. 245. EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 22.

Genotype: *Mystrium mysticum* Roger, 1862.

1. ***Mystrium silvestrii* SANTSCHI**, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 310, fig. 1 (♀, ♀).

Type locality: Victoria, CAMEROON (F. Silvestri).

**Xymmer (SANTSCHI)**

*Stigmatomma* subg. *Xymmer* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 311.

Genotype: *Stigmatomma (Xymmer) muticum* Santschi, 1914.

1. ***Xymmer muticum* (SANTSCHI)**.

*Stigmatomma (Xymmer) muticum* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 311, fig. 2 (♀).

Type locality: Ibadan, NIGERIA (F. Silvestri).

**Platythyreini Emery****Platythyrea ROGER**

*Platythyrea* ROGER, 1863, Berlin. Ent. Zeitschr., VII, p. 172. EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 28.

*Ponera* (part) GERSTAECKER, 1858, Monatsb. Ak. Wiss. Berlin, p. 262.

*Pachycondyla* (part) F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 108.

Genotype: *Pachycondyla punctata* F. Smith, 1858.

1. ***Platythyrea arnoldi* FOREL**, 1913, Deutsch. Ent. Zeitschr., Beih., p. 206 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 28 (♀).

Type locality: Shiloh, SOUTHERN RHODESIA (G. Arnold).

2. ***Platythyrea conradti* EMERY**, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 464 (♀, ♂); 1900, Bull. Soc. Ent. Italiana, XXXII, p. 107, fig. 2a (♂). FOREL, 1901, Mitt. Naturh. Mus. Hamburg, XVIII, p. 45 (♀); in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 3 (♂). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 129 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 29 (♀, ♂), Pl. II, figs. 1, 1b. FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 335 (♀, ♂); 1916, Rev. Suisse Zool., XXIV, p. 398 (♀, ♂). See p. 59.

Type locality: CAMEROON (Conradt).

WEST AFRICA: (Fülleborn). FRENCH CONGO: Gaboon (H. Petersen). FERNANDO PO: (Conradt). BELGIAN CONGO: St. Gabriel (Kohl); Risimu (Lang and Chapin).

3. ***Platythyrea cooperi* ARNOLD**, 1915, Ann. South African Mus., XIV, p. 29 (♀, ♂).

Type locality: Stella Bush, Durban, NATAL (C. B. Cooper).

4. ***Platythyrea cribrinodis* (GERSTAECKER) ROGER**, 1863, Berlin. Ent. Zeitschr., VII, p. 173; 1863, 'Verzeich. Formicid.,' p. 17. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 442. GERSTAECKER, 1871, Arch. f. Naturg., XXXVII, 1, p. 355; 1873, in 'v. d. Decken's Reisen in Ost Afrika, Gliederthiere,' p. 346 (♀).

EMERY, 1881, Ann. Mus. Civ. Genova, XVI, p. 270; 1892, *ibid.*, XXXII, p. 111 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 27. MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 200; 1895, Ann. Naturh. Hofmus. Wien, X, p. 125. EMERY, 1895, Ann. Mus. Civ. Genova, XXXV, p. 177; 1896, *ibid.*, XXXVII, p. 154 (♀, ♂); 1897, *ibid.*, XXXVIII, p. 597 (♀, ♂). H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 41. FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 76 (♀); 1907, Ann. Mus. Nat. Hungarici, V, p. 2 (♀). MAYR, 1907, Sitzb. Ak. Wiss. Wien, math. naturw. Kl., CXVI, Abt. 1, p. 387; in Sjöstedt, 1907, 'Exped. Kili-mandjaro, Meru, etc.,' II, 8, p. 10 (♀, ♂). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 29 (♀). FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 361 (♀). EMERY, 1912, Annuar. Mus. Zool. Univ. Napoli, N. S., III, No. 26, p. 1 (♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 110 (♀); 1913, Deutsch. Ent. Zeitschr., Beih., p. 208 (♂). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 47 (♀, ♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 23 (♀, ♂), Pl. I, fig. 4.

*Ponera cribrinodis* GERSTÄCKER, 1858, Monatsb. Ak. Wiss. Berlin, p. 262 (♀); in Peters, 1862, 'Reise n. Mossambique, Zool.,' V, p. 504 (♀), Pl. xxxii, fig. 3. ROGER, 1860, Berlin. Ent. Zeitschr., IV, p. 295.

Type locality: MOZAMBIQUE (Peters).

RHODESIA: Bulawayo (G. Arnold); Lake Bangweolo (Elena d'Aosta). GERMAN EAST AFRICA: Lake Tanganyika (Reichardt); Tanga (H. Brauns); Mt. Lettema (Katona); Buiko (Zimmer); Ngare-na-Nyuki, Mt. Meru (Sjöstedt); Kihenga; Korogwe; Mbusini (Stuhlmann); Mt. Ugono. BRITISH EAST AFRICA: Manda Island; Patta Island (Voeltzkow); Mombasa (v. d. Decken; C. Alluaud); Bura (H. Prell); Nairobi; Masai Plain; Tiwi; Lusinga Island, Victoria Nyanza; Fort Hall, Mt. Kenia, Meranga District (C. Alluaud); Maddo Wells (V. Bottego). SOMALILAND: Lugh; Matagoi to Lugh (V. Bottego); Mogadiscio; Obbia; Milmil (Bricchetti-Robecchi). ABYSSINIA: wells of Laffarugh to wells of Aberio, Ogaden (V. Bottego); Kaka, Schoa (Antinori); Salole; Lake Abaja; Bela; Daua (Ruspoli). UGANDA: Gondokoro (F. Werner).

41. Var. *brevidentata*, new name.

*Platythyrea cribrinodis* var. *punctata* ARNOLD, 1915, Ann. South African Mus., XIV, p. 24 (♀); *nec* *Platythyrea punctata* (F. Smith).

Type locality: Victoria Falls, RHODESIA (G. Arnold).

42. Var. *brevinodis* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 47 (♀).

Type locality: Samburu, Wa-Nyika District, BRITISH EAST AFRICA (C. Alluaud).

BRITISH EAST AFRICA: Mwatate, Wa-Taita District; Kibwezi, Wa-Kamba District (C. Alluaud).

5. *Platythyrea crucheti* SANTSCHI, 1911, Rev. Zool. Afr., I, p. 205 (♀).

Type locality: Cucala, BENGUELA (J. Cruchet).

6. *Platythyrea frontalis* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 466 (♀, ♀); 1911, 'Gen. Insect., Ponerinae,' p. 29 (♀, ♀).

Type locality: CAMEROON (Conradt).

7. *Platythyrea gracillima* WM. M. WHEELER. See p. 59 (♀).

Type locality: Avakubi, BELGIAN CONGO (Lang and Chapin).

8. *Platythyrea lamellosa* ROGER, 1863, Berlin. Ent. Zeitschr., VII, p. 173; 1863, 'Verzeich. Formicid.,' p. 17. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 442. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 27. MAYR, 1895, Ann. Naturh.

Hofmus. Wien, X, p. 125. EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 29 (♀). FOREL, 1913, Rev. Zool. Afr., II, p. 307 (♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 25 (♀).

*Ponera lamellosa* ROGER, 1860, Berlin. Ent. Zeitschr., IV, p. 295 (♀).

*Sima zethiops* var. *grisea* FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 5 (♂).

Type locality: Cape of Good Hope.

CAPE PROVINCE: (G. Arnold). TRANSVAAL. ORANGE FREE STATE: (O. Schneider). BECHUANALAND: between Khakhea and Kang (L. Schultze).

8a. Subsp. **longinoda** FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 75 (♀); in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 3 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 29 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 26 (♀).

Type locality: Valdezia, TRANSVAAL (P. Berthoud).

BECHUANALAND: Kooa to Segkoma (L. Schultze).

8a1. Var. **rhodesiana** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 347 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 27 (♀, ♀, ♂), Pl. I, fig. 3.

*Platythyrea lamellosa* var. *rhodesiana* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 110 (♀, ♂).

Type locality: SOUTHERN RHODESIA (G. Arnold).

BELGIAN CONGO: Kasongo (Pons).

8b. Subsp. **suturalis** FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 64 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 29 (♀).

Type locality: BENGUELA (C. Wellman).

9. **Platythyrea mocquerysi** EMERY, 1900, Bull. Soc. Ent. Italiana, XXXI, p. 270 (♀, ♀). See p. 1007.

91. Var. **matopoensis** ARNOLD, 1915, Ann. South African Mus., XIV, p. 32 (♀).

Type locality: Matoppo Hills, SOUTHERN RHODESIA (G. Arnold).

10. **Platythyrea modesta** EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 467 (♀). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 129 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 29 (♀). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 398 (♀). STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp., 1910-11,' I, p. 371 (♀).

Type locality: CAMEROON.

CAMEROON: Mundame (Conradt). SPANISH GUINEA: Uelleburg (Tessmann). BELGIAN CONGO: Duma (Schubotz).

11. **Platythyrea occidentalis** ERN. ANDRÉ, 1890, Rev. d'Ent. Caen, IX, p. 315 (♀). 'DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 27. ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 3 (♂). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 29 (♀, ♂).

Type locality: SIERRA LEONE (Mocquerys).

FRENCH CONGO: Ogowé (Mocquerys).

12. **Platythyrea schultzei** FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 3 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 29 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 25 (♀).

Type locality: Salem, GERMAN SOUTHWEST AFRICA (L. Schultze).

SOUTHERN RHODESIA: Lonely Mine (Swale). GERMAN SOUTHWEST AFRICA: Windhoek (L. Schultze).

121. Var. **bequaerti** FOREL, 1913, Rev. Zool. Afr., II, p. 307 (♀, ♂).

Type locality: Nyangwe, BELGIAN CONGO (J. Bequaert).

BELGIAN CONGO: Sankisia (J. Bequaert).

13. *Platythyrea tenuis* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 467 (♀, ♀); 1911, 'Gen. Insect., Ponerinae,' p. 29 (♀, ♀).

Type locality: CAMEROON (Conradt).

14. *Platythyrea viehmeyeri* SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 429 (♀).

Type locality: Khutu Steppe, GERMAN EAST AFRICA (K. Schwartze).

### Proceratiini Emery

#### *Sysphincta* ROGER, *emend.*

*Sysphincta* ROGER, 1863, Berlin. Ent. Zeitschr., VII, p. 175.

*Sysphincta* MAYR, 1865, 'Reise Novara, Zool.,' II, Formicidae, p. 12. EMERY, 1909, Deutsch. Ent. Zeitschr., p. 359; 1911, 'Gen. Insect., Ponerinae,' p. 50.

*Proceratium* (part) MAYR, 1886, Verh. Zool. Bot. Ges. Wien, XXXVI, p. 437.

*Ponera* (part) ROGER, 1860, Berlin. Ent. Zeitschr., IV, p. 291.

Genotype: *Sysphincta micrommata* Roger, 1863.

1. *Sysphincta arnoldi* (FOREL) ARNOLD, 1915, Ann. South African Mus., XIV, p. 35 (♀).

*Proceratium* (*Sysphincta*) *arnoldi* FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 210 (♀).

Type locality: Bulawayo, SOUTHERN RHODESIA (G. Arnold).

#### *Discothyrea* ROGER

*Discothyrea* ROGER, 1863, Berlin. Ent. Zeitschr., VII, p. 176. EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 51; 1911, 'Gen. Insect., Ponerinae,' p. 51.

Genotype: *Discothyrea testacea* Roger, 1863.

1. *Discothyrea hewitti* ARNOLD, 1916, Ann. South African Mus., XIV, p. 160 (♀).

Type locality: Grahamstown, CAPE PROVINCE (Hewitt).

2. *Discothyrea oculata* EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 52 (♀, ♀, ♂). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 351 (♀, ♂). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 52 (♀, ♀, ♂). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 312 (♀).

Type locality: CAMEROON (L. Conradt).

FRENCH CONGO: Brazzaville (A. Weiss). FRENCH GUINEA: Mamou (F. Silvestri).

2<sub>1</sub>. Var. *sculptior* SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 302 (♀).

Type locality: FRENCH CONGO (A. Weiss).

3. *Discothyrea trægaordhi* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 3 (♀).

Type locality: Pietermaritzburg, NATAL (I. Trägårdh).

#### *Probolomyrmex* MAYR

*Probolomyrmex* MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 2. EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 52.

Genotype: *Probolomyrmex filiformis* Mayr, 1901.



1. **Probolomyrmex filiformis** MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 3 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 52 (♀), Pl. II, figs. 10, 10b. SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 312 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 34 (♀), Pl. I, figs. 2, 2a.

Type locality: Port Elizabeth, CAPE PROVINCE (H. Brauns).

FRENCH GUINEA: Kakoulima (F. Silvestri).

#### **Escherichia FOREL**

- Escherichia* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 245. EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 53.

Genotype: *Escherichia brevirostris* Forel, 1910.

1. **Escherichia brevirostris** FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 246 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 53 (♀).

Type locality: Ghindà, ERITREA (K. Escherich).

#### **Pseudosphincta ARNOLD**

- Pseudosphincta* ARNOLD, 1916, Ann. South African Mus., XIV, p. 161.

Genotype: *Pseudosphincta poweri* Arnold, 1916.

1. **Pseudosphincta poweri** ARNOLD, 1916, Ann. South African Mus., XIV, p. 162, figs. 9, 9a (♀).

Type locality: Kimberley, CAPE PROVINCE (Power).

#### **Ponerini Forel**

##### **Centromyrmex MAYR**

- Centromyrmex* MAYR, 1866, Verh. Zool. Bot. Ges. Wien, XVI, p. 894. EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 57.

*Spalacomyrmex* EMERY, 1889, Ann. Mus. Civ. Genova, XXVII, p. 489.

*Ponera* (part) ROGER, 1861, Berlin. Ent. Zeitschr., V, p. 5.

Genotype: *Centromyrmex bohemani* Mayr, 1866.

1. **Centromyrmex constanciae** ARNOLD, 1915, Ann. South African Mus., XIV, p. 38 (♀, ♀), Pl. II, figs. 14, 14a, 14b, 14c.

Type locality: Bulawayo, SOUTHERN RHODESIA (G. Arnold).

SOUTHERN RHODESIA: Bembesi (G. Arnold).

1<sub>1</sub>. Var. **arnoldi** (SANTSCHI).

*Centromyrmex arnoldi* SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 229, fig. (♀, ♂).

*Centromyrmex constantiae* var. *arnoldi* SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 8.

Type locality: Amatongas Forest, PORTUGUESE EAST AFRICA (G. Arnold).

2. **Centromyrmex sellaris** MAYR, 1896, Ent. Tidskr., XVII, p. 230 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 58 (♀).

Type locality: CAMEROON (Sjöstedt).

2<sub>1</sub>. Var. **longiventris** SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 229 (♀).

*Centromyrmex sellaris* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 313 (♀) (*nec* Mayr).

Type locality: Victoria, CAMEROON (F. Silvestri).

**Streblognathus MAYR**

*Streblognathus* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 716. EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 468; 1911, 'Gen. Insect., Ponerinae,' p. 61.

*Ponera* (part) F. SMITH, ROGER.

Genotype: *Ponera æthiopica* F. Smith, 1858.

1. ***Streblognathus æthiopicus*** (F. SMITH) MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 716 (♀), Pl. XIX, figs. 10 and 11; 1863, *ibid.*, XIII, p. 454. ROGER, 1863, 'Verzeich. Formicid.,' p. 19. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 31. R. T. LEWIS, 1896, Journ. Quekett Micr. Club, (2) VI, p. 274, Pl. XII, figs. 1-8 (♀). EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 468 (♂); 1900, Bull. Soc. Ent. Italiana, XXXII, p. 105, fig. 1 (♂). FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 51 (♀); in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 3 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 61 (♀). SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 3 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 41 (♀, ♂), Pl. I, fig. 5.

*Ponera æthiopica* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 91 (♀), Pl. VI, figs. 19, 20. ROGER, 1861, Berlin. Ent. Zeitschr., V, p. 11 (♀).

Type locality: South Africa.

BASUTOLAND. NATAL: Van Reenen (I. Trägårdh); Durban (Wilms; v. Stuckrad); Richmond (J. R. Ward). CAPE PROVINCE: Willowmore (H. Brauns); Uitenhage. TRANSVAAL: (Heinemann).

**Paltothyreus MAYR**

*Paltothyreus* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 735; 1866, *ibid.*, XVI, p. 894. EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 62.

*Formica* (part) FABRICIUS. *Ponera* (part) GUÉRIN, F. SMITH, ROGER.

*Pachycondyla* (part) F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 105.

Genotype: *Formica tarsata* Fabricius, 1798.

1. ***Paltothyreus tarsatus*** (FABRICIUS) MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 736. ROGER, 1863, 'Verzeich. Formicid.,' p. 17. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 440; 1866, *ibid.*, XVI, p. 894 (♂), Pl. XX, fig. 6. FOREL, in Grandidier, 1891, 'Hist. Phys. Nat. Madagascar,' XX, 2, p. 136 (♀, ♀, ♂). EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), p. 557 (♀, ♀, ♂); 1892, Ann. Mus. Civ. Genova, XXXII, p. 111 (♀). FOREL, 1892, Mitth. Schweiz. Ent. Ges., VIII, p. 352 (♀, ♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 32. MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 200. H. STADELMANN, 1893, Mitth. Deutsch. Schutzgeb., VI, p. 217. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 74. EMERY, 1894, Mem. Accad. Sc. Bologna, (5) IV, p. 112 (♀). MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 126 (♀, ♀, ♂). EMERY, 1895, Ann. Mus. Civ. Genova, XXXV, p. 177. ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 3 (♀, ♀). MAYR, 1896, Ent. Tidskr., XVII, p. 231. EMERY, 1896, Ann. Mus. Civ. Genova, XXXVII, p. 115 (♀, ♀, ♂); 1897, *ibid.*, XXXVIII, p. 597. FOREL, 1897, Abhandl. Senckenberg. Naturf. Ges., XXI, p. 188 (♀). H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 41. A. v. SCHULTHESS, 1899, Bull. Soc. Vaudoise Sc. Nat., (5) XXXV, p. 253 (♀). EMERY, 1899, Ann. Mus. Civ. Genova, XXXIX, p. 500 (♀, ♀, ♂); 1900, Bull. Soc. Ent. Italiana, XXXII, p. 112, fig. 5 (♀, ♀). SJÖSTEDT, 1904, 'I Västafrikas Urskogar,' p. 210. SCHÖNLAND, 1904, Trans. Ent. Soc. London, Proc., p.

xl. ZAVATTARI, 1907, Boll. Mus. Zool. Anat. Comp. Torino, XXII, No. 548, p. 2 (♀); 1907, *ibid.*, XXII, No. 550, p. 2 (♀). DIXEY and LONGSTAFF, 1907, Trans. Ent. Soc. London, pp. 354 and 357. MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 8. FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 75 (♀); 1909, Ann. Soc. Ent. Belgique, LIII, p. 51 (♀, ♀) and p. 64 (♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 350 (♀, ♀). ZAVATTARI, 1909, 'Il Ruwenzori, Parte Scientific.,' I, p. 213 (♀). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 129 (♀, ♀, ♂). FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 3 (♀); 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 361 (♀). STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08),' III, p. 377 (♀, ♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 62 (♀), Pl. II, fig. 14; 1912, Annuar. Mus. Zool. Univ. Napoli, N. S., III, No. 26, p. 1 (♀). FOREL, 1913, Rev. Zool. Afr., II, p. 308 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 347 (♀, ♀, ♂); 1913, Rev. Suisse Zool., XXI, p. 666 (♀, ♂). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 313 (♀, ♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 47 (♀, ♀); 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 4 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 44 (♀, ♀, ♂), Pl. I, figs. 6 and 10. STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. (1910-11),' I, p. 371 (♀). SANTSCHI, 1919, Rev. Zool. Afr., VII, pp. 79 and 81 (♀, ♀, ♂). CARPENTER, 1920, 'A Naturalist on Lake Victoria,' pp. 50 and 281. See p. 61.

*Formica tarsata* FABRICIUS, 1798, 'Suppl. Ent. Syst.,' p. 280 (♀); 1804, 'Syst. Piez.,' p. 408 (♀).

*Ponera tarsata* LEPELETIER, 1836, 'Hist. Nat. Ins. Hym.,' I, p. 194 (♀). ROGER, 1860, Berlin. Ent. Zeitschr., IV, p. 310; 1861, *ibid.*; V, p. 166.

*Ponera gagates* GUÉRIN, 1845, 'Iconogr. Règne Anim.,' VII, Insect., p. 423 (♀). FAIRMAIRE, in J. Thomson, 1858, 'Archives Entomologiques,' II, p. 263. F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 90.

*Ponera pestilentia* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 92 (♀).

*Ponera spiniventris* F. SMITH, 1858, *ibid.*, p. 92 (♂).

*Pachycondyla simillima* F. SMITH, 1858, *ibid.*, p. 105 (♀), Pl. VII, fig. 17. ROGER, 1863, 'Verzeich. Formicid.,' p. 18.

*Paltothyreus pestilentia* A. GIRARD, in Capello and Ivens, 1882, 'From Benguela to the Territory of Yacca,' II, p. 294. M. L. SYKES, 1900, Trans. Manchester Microsc. Soc., XX, (1899), p. 90. W. F. KIRBY, 1900, Proc. Zool. Soc. London, p. 47.

*Paltothyreus pestilentia* RADOSZKOWSKY, 1881, Journ. Sci. Ac. Lisboa, VIII, No. 31, p. 198. A. GIRARD, *ibid.*, p. 227.

*Paltothyreus ? simillima* MAYR, 1886, Verh. Zool. Bot. Ges. Wien, XXXVI, p. 358.

Type locality: Gorée Island, SENEGAMBIA.

SENEGAMBIA: Dakar (C. Alluaud); Thiès (F. Silvestri). CASAMANCE: (Claveau). PORTUGUESE GUINEA: Bissis Island (Lucas). FRENCH GUINEA: Los Islands (C. Alluaud), Konakry; Kakoulima; Kindia (F. Silvestri). SIERRA LEONE: Samlia Falls, River N'Ganie (Mocquerys). IVORY COAST: Dimbroko (Le Moul't); Jacqueline; Grand Bassam (Lohier); Assinie (C. Alluaud). GOLD COAST: Akra. TOGO: Bismarckburg (Conradt; Büttner). CAMEROON: (Sjöstedt; F. Silvestri; Conradt); Mundame (Conradt); Bibundi (Tessmann). SPANISH GUINEA: Alen (Tessmann). FRENCH CONGO: Ogowe (Mocquerys); Fort Crampel (Le Moul't); Brazzaville. BELGIAN CONGO: Kwesi to Kilo (Bayer); Kondué (Luja); Kiniati; Eala (R.

Mayné); Mayombe (Deleval); village of Denge, Niangara (Huttereau); Katanga (Lemaire); Ikelemba (Kinsberger); Boga; Beni; Avakubi; Ubangi District (Schubotz); Kindu (Grauer); Lake Leopold II (Leyder); Garamba, Yakuluku; Stanleyville; Médje; Risimu; Leopoldville; Bafwasende; Faradje; Gamangui; Bafwabaka; Niangara; Niapu; Ngayu; Akenge; Avakubi (Lang and Chapin). ANGOLA: (Welwitsch). BENGUELA: (C. Wellman). GERMAN SOUTHWEST AFRICA: (Lübbert); Okahandja (Peters); Omaheke (Trotha). RHODESIA: Luapula River (Elena d'Aosta); Bulawayo; Bembesi; Victoria Falls; Matoppo Hills (G. Arnold); Kazungula (Jallá). CAPE PROVINCE: Willowmore (H. Brauns). NATAL: Stamford Hill (I. Trägårdh); Port Natal (H. Brauns). ZULULAND: (Marley). PORTUGUESE EAST AFRICA: Delagoa (Liengme); Inhambane (Fornasini). GERMAN EAST AFRICA: Tanga; Rosako, Usaramo (Stuhlmann); Buiko; Monga (H. Prell); Amani (Zimmer); Mombo, Usambara (Sjöstedt); Lake Tanganyika (Reichardt). ZANZIBAR: (Voeltzkow). BRITISH EAST AFRICA: Patta Island (Voeltzkow); Shimoni; Mbuyuni, Pori; Kisumu, Victoria Nyanza; Nyangnori, western Nandi (Alluaud and Jeannel); Mombasa (H. Prell). UGANDA: Buzubizi (Alluaud and Jeannel); Butiti; Ibanda (Duke of Abruzzi). SOMALILAND: (C. Keller); Bularli (Peel); Merca (Taramasso); Mogadiscio; Obbia; Ellahslaj, Uorandi; Las Ej (Bricchetti-Robecchi); Hargeisa (V. Bottego). ABYSSINIA: Buditu to Dimé; Arussi Galla (V. Bottego); Webi (Bricchetti-Robecchi); Ogaden; Daa (Ruspoli).

Has been recorded from Madagascar, but undoubtedly through an error.

1. Var. **medianus** SANTSCHI, 1919, Rev. Zool. Afr., VII, pp. 80 and 82 (♀, ♂).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

CAMEROON: Molundu (Reichensperger). FRENCH CONGO: Ubangi (Augustin); Borda (Charleux). BENGUELA: Cucala (J. Cruchet).

12. Var. **subopacus** SANTSCHI, 1919, Rev. Zool. Afr., VII, pp. 80 and 82 (♀, ♀).

Type locality: Samkita, FRENCH CONGO (F. Faure).

- 1a. Subsp. **delagoensis** (EMERY) SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 48 (♀, ♀).

*Pallothyreus tarsatus* var. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 126.

*Pallothyreus tarsatus* var. *delagoensis* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 468 (♀, ♀); 1911, 'Gen. Insect., Ponerinæ,' p. 62 (♀, ♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 45 (♀). SANTSCHI, 1919, Rev. Zool. Afr., VII, pp. 80 and 82 (♀).

Type locality: Delagoa Bay, PORTUGUESE EAST AFRICA.

RHODESIA: (G. Arnold). GERMAN EAST AFRICA: Mt. Kilimanjaro, River Himo (C. Alluaud); Pangani (Reichensperger). BRITISH EAST AFRICA: Mt. Kenia, Meranga, Fort Hall; Bura, Wa-Taita; Kibwezi, Wa-Kamba; Mombasa; Maji-yachumvi, Wa-Nyika; Samburu, Wa-Nyika (Alluaud and Jeannel).

- 1a1. Var. **robustus** (SANTSCHI).

*Pallothyreus tarsatus* var. *robusta* SANTSCHI, 1919, Rev. Zool. Afr., VII, pp. 81 and 82 (♀, ♀).

Type locality: Buarsangueli, SOMALILAND (Revoil).

- 1a2. Var. **striatidens** (SANTSCHI).

*Pallothyreus tarsatus* var. *striatidens* SANTSCHI, 1919, Rev. Zool. Afr., VII, pp. 81 and 82 (♀, ♀).

Type locality: Kibwezi, BRITISH EAST AFRICA (C. Alluaud).

**Glyphopone FOREL**

*Glyphopone* FOREL, 1913, Rev. Zool. Afr., II, p. 308.

Genotype: *Glyphopone bequaerti* FOREL, 1913.

1. **Glyphopone bequaerti** FOREL, 1913, Rev. Zool. Afr., II, p. 308, fig. 1 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 347 (♀). BEQUAERT, 1913, Rev. Zool. Afr., II, p. 422.

Type locality: Kibombo, BELGIAN CONGO (J. Bequaert).

BELGIAN CONGO: Kasongo (Pons).

**Leptopone (ARNOLD)**

*Glyphopone* subg. *Leptopone* ARNOLD, 1916, Ann. South African Mus., XIV, p. 163.

Genotype: *Glyphopone (Leptopone) rufigaster* Arnold, 1916.

1. **Leptopone rufigaster** (ARNOLD).

*Glyphopone (Leptopone) rufigaster* ARNOLD, 1916, Ann. South African Mus., XIV, p. 163, figs. 10, 10a (♀).

Type locality: Victoria Falls, RHODESIA (G. Arnold).

**Megaponera MAYR**

*Megaponera* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 734. EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 67.

*Megaloponera* ROGER, 1863, 'Verzeich. Formicid.,' p. 17.

*Ponera* (part) GUÉRIN, GERSTÄCKER, ROGER. *Formica* (part) FABRICIUS, LATREILLE.

Genotype: *Formica fœtens* Fabricius, 1793.

1. **Megaponera fœtens** (FABRICIUS) MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 735 (♀); 1863, *ibid.*, XIII, p. 428. MAGRETTI, 1884, Ann. Mus. Civ. Genova, XXI, p. 538 (♀); 1884, Bull. Soc. Ent. Italiana, XV, (1883), p. 244 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 30. MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 200; 1895, Ann. Naturh. Hofmus. Wien, X, p. 125. EMERY, 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 597 (♀, ♂). H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 41. GESTRO, 1901, Ann. Mus. Civ. Genova, XL, p. 729. MAYR, 1907, Sitzb. Ak. Wiss. Wien, math. naturw. Kl., CXVI, Abt. 1, p. 387. STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 130 (♀); 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exped. (1907-08),' III, p. 377 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 68 (♀); 1912, Annuar. Mus. Zool. Univ. Napoli, N. S., III, No. 26, p. 1 (♀). ARNOLD, 1913, Proc. Rhodesia Sc. Assoc., XII, p. 12; 1914, *ibid.*, XIII, p. 26. H. BRAUNS, 1914, *ibid.*, XIII, pp. 33, 35, 39, and 42. SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 48 (♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 313 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 46, fig. 6 (♀, ♂), Pl. I, figs. 7, 8, and 8a. POULTON, 1915, Trans. Ent. Soc. London, pp. v-vii and lvi-lxi. BICKHARDT, 1916, Entom. Blätter, XII, p. 2. STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 371 (♀, ♂). CARPENTER, 1918, Trans. Ent. Soc. London, (1917), Proc., p. lx; 1920, 'A Naturalist on Lake Victoria,' p. 282. See p. 64.

*Formica fœtens* FABRICIUS, 1793, 'Ent. Syst.,' II, p. 354 (♀); 1804, 'Syst. Piez.,' p. 401 (♀). F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 32.

*Formica analis* LATREILLE, 1802, 'Hist. Nat. Fourmis,' p. 282 (♀).

*Ponera abyssinica* GUÉRIN, in Lefebvre, 1848, 'Voy. Abyssinie,' IV, Zool., part 6, p. 352 (♀), Pl. VII, fig. 6. F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 90. RADOSZKOWSKY, 1876, Hor. Soc. Ent. Rossica, XII, p. 140. CANNAVIELLO, 1900, Bull. Soc. Ent. Italiana, XXXII, p. 297.

*Ponera laeviuscula* GERSTÄCKER, 1858, Monatsb. Ak. Wiss. Berlin, p. 262 (♀); in Peters, 1862, 'Reise n. Mossambique, Zool.,' V, p. 505 (♀), Pl. XXXII, fig. 4.

*Ponera fatens* GERSTÄCKER, 1858, Monatsb. Ak. Wiss. Berlin, p. 262; 1859, Arch. f. Naturg., XXV, 2, p. 431. ROGER, 1860, Berlin. Ent. Zeitschr., IV, p. 310 (♀). GERSTÄCKER, 1862, in Peters, 'Reise n. Mossambique, Zool.,' V, p. 504 (♀).

*Megaloponera fatens* ROGER, 1863, 'Verzeich. Formicid.,' p. 17. EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 368. RADOSZKOWSKY, 1881, Jorn. Sci. Ac. Lisboa, VIII, No. 31, p. 197. FOREL, 1892, Mitth. Schweiz. Ent. Ges., VIII, p. 352 (♀); 1894, ibid., IX, p. 75. EMERY, 1895, Ann. Mus. Civ. Genova, XXXV, p. 177; 1899, ibid., XXXIX, p. 500 (♂). FOREL, 1904, Ann. Mus. Zool. Ac. Sc. St. Pétersbourg, VIII, (1903), p. 369 (♀, ♂); 1907, Ann. Mus. Nat. Hungarici, V, p. 2 (♀). MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 9 (♀, ♂). FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 64 (♀); 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 244 (♀). PRELL, 1911, Zool. Anzeiger, XXXVIII, p. 244, fig. 1. FOREL, 1911, Rev. Zool. Afr., I, p. 274 (♀); 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 361 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, pp. 108 (♀) and 347 (♀, ♂); 1913, Rev. Zool. Afr., II, p. 308 (♀); 1913, Deutsch. Ent. Zeitschr., Beih., p. 206. J. BEQUAERT, 1913, Rev. Zool. Afr., II, p. 422 (♀).

*Ponera crassicornis* GERSTÄCKER, 1858, Monatsb. Ak. Wiss. Berlin, p. 262 (♀); 1862, in Peters, 'Reise n. Mossambique, Zool.,' V, p. 506 (♀), Pl. XXXII, fig. 5. ROGER, 1860, Berlin. Ent. Zeitschr., IV, p. 309; 1863, 'Verzeich. Formicid.,' p. 23. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 448.

*Megaponera crassicornis* MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 200. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 30. EMERY, 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 597 (♀). H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 41.

*Megaloponera crassicornis* EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 368 (♀). FOREL, 1892, Mitth. Schweiz. Ent. Ges., VIII, p. 352 (♀); 1907, Ann. Mus. Nat. Hungarici, V, p. 2 (♀).

*Megaponera dohrni* EMERY, 1902, Rend. Accad. Sc. Bologna, N. S., VI, p. 30 (♀).

Type locality: Guinea (Isert).

SENEGAMBIA: Thiès (F. Silvestri). SIERRA LEONE: (F. Silvestri). GOLD COAST: Akropong (Imhoff). TOGO: (H. Brauns); Bismarckburg (Conradt). SOUTHERN NIGERIA: Agege; Ibadan (Farquharson). CAMEROON: Metit (G. Schwab). FRENCH CONGO: Fort de Pessel; Fort Crampel (Schubotz). BELGIAN CONGO: Lukula (Daniel); Kondué (Luja); Kambove (S. A. Neave); Malela; Sankisia (J. Bequaert); Kwesi to Kilo (Bayer); Kindu (Burgeon); Kwidjwi Island, Lake Kivu; Libenge (Schubotz); Zambi; Niangara; Rungu; Avakubi; Faradje; Panga to Banalia; Boyulu; Niapu; Garamba; Akenge; Gamangui (Lang and Chapin). ANGOLA: (Welwitsch). BENGUELA: (C. Wellman). RHODESIA: Mumbwa (Dollman); Loangwa Valley (S. A. Neave); Bulawayo (G. Arnold); Luapula River (Elena d'Aosta). PORTUGUESE EAST AFRICA: Tete; Mozambique (Peters). GERMAN EAST AFRICA: Mt. Kilimanjaro (Bornemisza); Moschi (Katona); Njussi

(H. Prell); Amani; near Buiko (Zimmer); Mbusini; Bondei (Stuhlmann); Kibonoto, Mt. Kilimanjaro (Sjöstedt); Itigi; Kyaka Fort on the Kagera River (G. D. H. Carpenter); Usambara. ZANZIBAR. BRITISH EAST AFRICA: Pori of Serengeti between Bura and Taveta; Fort Hall; Mbuyuni (Alluaud and Jeannel). UGANDA: Unyoro Province, Lake Albert (C. Alluaud); Gondokoro (F. Werner). ABYSSINIA: Arussi Galla, Ganale Gudda; Saneurar to Amarr Burgi; Dimé to Bass Narok (V. Bottego); Sciotel (Beccari); Daua; Ogaden; Degabolla; Lake Abaja; Brava (Ruspoli); Gogfale; Harar (Kachovskij); southern Abyssinia (Ilg); Adua; Makalle. SOMALILAND: (C. Keller); Lower Ganana (V. Bottego). ERITREA: Keren (Beccari; Magretti); Bogos (Antinori); Ghinda (K. Escherich). ANGLO-EGYPTIAN SUDAN: Sennar.

1. Var. **rapax** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 49 (♀).

Type locality: New Moschi, Mt. Kilimanjaro, 800 m., GERMAN EAST AFRICA (Alluaud and Jeannel).

GERMAN EAST AFRICA: Moschi and Kilema, 1400–1500 m. (Alluaud and Jeannel).

### Ophthalmopone FOREL

*Ophthalmopone* FOREL, 1890, Ann. Soc. Ent. Belgique, XXXIV, C. R., p. cxi. EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 69.

*Pachycondyla* (part) EMERY, 1886, Bull. Soc. Ent. Italiana, XVIII, p. 360.

Genotype: *Ophthalmopone berthoudi* Forel, 1890.

1. **Ophthalmopone berthoudi** FOREL, 1890, Ann. Soc. Ent. Belgique, XXXIV, C. R., p. cxii (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 31. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 76 (♀, ♂). EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 69 (♀, ♂). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 108 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 50 (♀, ♂), Pl. III, figs. 11, 13.

Type locality: Valdezia, TRANSVAAL (P. Berthoud).

SOUTHERN RHODESIA: Bulawayo (G. Arnold). PORTUGUESE EAST AFRICA: Delagoa (Liengme).

2. **Ophthalmopone depilis** EMERY, 1902, Rend. Accad. Sc. Bologna, N. S., VI, p. 29 (♀); 1911, 'Gen. Insect., Ponerinæ,' p. 69 (♀).

Type locality: SAN THOMÉ (Mocquers).

3. **Ophthalmopone hottentota** EMERY, 1902, Rend. Accad. Sc. Bologna, N. S., VI, p. 30; 1911, 'Gen. Insect., Ponerinæ,' p. 70 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 52 (♀, ♂), Pl. II, fig. 12.

*Pachycondyla hottentota* EMERY, 1886, Bull. Soc. Ent. Italiana, XVIII, p. 360 (♀); 1890, Ann. Soc. Ent. France, (6) X, p. 72 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 34.

*Ophthalmopone lanceolata* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 125 (♀).

Type locality: Cape of Good Hope (L. Péringuey).

SOUTHERN RHODESIA: Sebakwe (G. Arnold). CAPE PROVINCE: generally (G. Arnold); Willowmore (H. Brauns).

4. **Ophthalmopone ilgi** FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 76 (♀). EMERY, 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 597 (♀); 1911, 'Gen. Insect., Ponerinæ,' p. 70 (♀).

Type locality: SOUTHERN ABYSSINIA (Ilg).

SOMALILAND: (Ruspoli).

5. **Ophthalmopone mocquersyi** EMERY, 1902, Rend. Accad. Sc. Bologna, N. S., VI, p. 29 (♀). FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 422 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 70 (♀).

Type locality: SAN THOMÉ (Mocquers).

ANGOLA: Mossamedes.

### **Bothroponera MAYR**

*Bothroponera* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 717.

*Pachycondyla* subg. *Bothroponera* EMERY, 1911, 'Gen. Insect., Ponerinae,' p.

75. FOREL, ARNOLD, SANTSCHI.

*Pachycondyla* (part) F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 105.

*Ponera* (part) JERDON, F. SMITH, ROGER.

Genotype: *Bothroponera pumicosa* Roger, 1860.

1. **Bothroponera cariosa** EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 20 (♀).

*Pachycondyla* (*Bothroponera*) *cariosa* EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 45; 1911, 'Gen. Insect., Ponerinae,' p. 76 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 59 (♀).

Type locality: Delagoa Bay, PORTUGUESE EAST AFRICA.

CAPE PROVINCE. TRANSVAAL.

2. **Bothroponera cavernosa** (ROGER) MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 717; 1863, *ibid.*, XIII, p. 397. ROGER, 1863, 'Verzeich. Formicid.,' p. 16. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 36.

*Ponera cavernosa* ROGER, 1860, Berlin. Ent. Zeitschr., IV, p. 288 (♀).

*Pachycondyla* (*Bothroponera*) *cavernosa* EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 45; 1911, 'Gen. Insect., Ponerinae,' p. 76. ARNOLD, 1915, Ann. South African Mus., XIV, p. 60 (♀).

Type locality: Caffraria.

CAPE PROVINCE.

3. **Bothroponera crassa** EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 111 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 36. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 75. ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 2 (♀).

*Ponera crassa* EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 366, fig. (♀).

*Ponera* (*Bothroponera*) *crassa* EMERY, 1895, *ibid.*, XXXV, p. 177.

*Pachycondyla* (*Bothroponera*) *crassa* EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 46. FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 244 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 77 (♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 347 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 50 (♀).

Type locality: Sciotel, ABYSSINIA (Beccari).

FRENCH CONGO: Ogowé (Mocquers). BELGIAN CONGO: Mayombe (de Briey). BRITISH EAST AFRICA: Nairobi (C. Alluaud). ERITREA: Nefasit (Ilg). ABYSSINIA: (Ilg); Arussi Galla, Ganale Gudda; Wells of Laffarugh to Wells of Aberio; Ogaden (V. Bottego); Webi (Bricchetti-Robecchi). SOMALILAND: Obbia (Bricchetti-Robecchi); Erdal.



31. Var. *ilgi* (FOREL).

*Pachycondyla* (*Bothroponera*) *crassa* var. *ilgi* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 244 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 77 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 50. (♀).

Type locality: Schoa, ABYSSINIA (Ilg).

BRITISH EAST AFRICA: Kenia Region between the Amboni and Naremur Rivers, 1800–2000 m. (Alluaud and Jeannel).

4. *Bothroponera cribrata* (SANTSCHI).

*Pachycondyla* (*Bothroponera*) *cribrata* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 349 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 76 (♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

5. *Bothroponera fugax* (FOREL).

*Pachycondyla* (*Bothroponera*) *fugax* FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 7 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 76 (♀).

Type locality: Arusha-chini, Lake Djipe, GERMAN EAST AFRICA (Katona).

6. *Bothroponera granosa* (ROGER) MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 717; 1863, *ibid.*, XIII, p. 397. ROGER, 1863, 'Verzeich. Formicid.,' p. 16. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 36.

*Ponera granosa* ROGER, 1860, Berlin. Ent. Zeitschr., IV, p. 290 (♀).

*Pachycondyla* (*Bothroponera*) *granosa* EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 45; 1911, 'Gen. Insect., Ponerinae,' p. 76 (♀). FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 214 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 61 (♀), Pl. II, fig. 16.

Type locality: Cape of Good Hope (Drège).

CAPE PROVINCE: George, Knysna (H. Brauns). NATAL. SOUTHERN RHODESIA: Victoria Falls (L. Péringuey).

7. *Bothroponera krügeri* (FOREL).

*Pachycondyla* (*Bothroponera*) *krügeri* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 28 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 56 (♀).

*Pachycondyla* (*Bothroponera*) *kruegeri* EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 77 (♀). SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III; p. 4 (♀). TRÄGÅRDH, *ibid.*, p. 43.

Type locality: Valdezia, TRANSVAAL (P. Berthoud).

ZULULAND: Umfolosi (I. Trägårdh). TRANSVAAL: (G. Arnold).

71. Var. *rhodesiana* (FOREL).

*Pachycondyla* (*Bothroponera*) *krügeri* var. *rhodesiana* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 109 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 57 (♀, ♂).

Type locality: Bulawayo, SOUTHERN RHODESIA (G. Arnold).

7a. Subsp. *asina* (SANTSCHI).

*Pachycondyla* (*Bothroponera*) *asina* SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, p. 153 (♀).

*Pachycondyla* (*Bothroponera*) *kruegeri* subsp. *asina* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 4 (♀).

Type locality: BRITISH EAST AFRICA (Demarchi).

ZULULAND: Umfolosi (I. Trägårdh).

8. *Bothroponera lævissima* (ARNOLD).

*Pachycondyla (Bothroponera) levissima* ARNOLD, 1915, Ann. South African Mus., XIV, p. 58 (♀), Pl. II, figs. 15, 15a.

Type locality: Saldanha Bay, CAPE PROVINCE (G. Arnold).

9. ***Bothroponera nasica*** (SANTSCHI).

*Pachycondyla (Bothroponera) nasica* SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 6 (♀).

Type locality: Samkita, FRENCH CONGO (F. Faure).

10. ***Bothroponera pachyderma*** (EMERY). See p. 73.

*Pachycondyla (Bothroponera) pachyderma* EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 49 (♀, ♀). MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 9 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 76 (♀, ♀).

Type locality: CAMEROON (Conradt).

GERMAN EAST AFRICA: Kibonoto, Mt. Kilimanjaro, 1000–2000 m.; Natron Lakes (Sjöstedt). BELGIAN CONGO: Manamana; Bafwasende; Medje; Ngayu; Niapu; Niangara; Akengé (Lang and Chapin).

10<sub>1</sub>. Var. ***attenata*** (SANTSCHI).

*Pachycondyla (Bothroponera) pachyderma* var. *attenata* SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 7 (♀).

Type locality: N'gazi, BELGIAN CONGO (Elskens).

10<sub>2</sub>. Var. ***funerea*** Wm. M. WHEELER. See p. 73 (♀).

Type locality: Medje, BELGIAN CONGO (Lang and Chapin).

10<sub>3</sub>. Var. ***postsquamosa*** (SANTSCHI).

*Pachycondyla (Bothroponera) pachyderma* var. *postsquamosa* SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 7 (♀).

Type locality: Lobay, FRENCH CONGO (Riggenbach).

11. ***Bothroponera picardi*** (FOREL).

*Pachycondyla (Bothroponera) picardi* FOREL, 1901, Mitth. Schweiz. Ent. Ges., X, p. 304 (♀); in Baum, 1903, 'Kunene-Sambesi Expedition,' p. 559 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 77 (♀).

Type locality: between the Cubango and Cuito Rivers, MOSSAMEDES (Baum and Van der Kellen).

12. ***Bothroponera pumicosa*** (ROGER) MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 717; 1863, *ibid.*, XIII, p. 397. ROGER, 1863, 'Verzeich. Formicid.,' p. 16. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 36.

*Ponera pumicosa* ROGER, 1860, Berlin. Ent. Zeitschr., IV, p. 290 (♀).

*Pachycondyla pumicosa* FOREL, 1901, Rev. Suisse Zool., IX, p. 344.

*Pachycondyla (Bothroponera) pumicosa* EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 45. STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 130 (♀). FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 4 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 76 (♀). SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 4 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 62 (♀, ♂).

Type locality: Caffraria.

CAMEROON: Mundame (Conradt). CAPE PROVINCE: (H. Brauns; Drège); Cape Town (Wilms). NATAL: (Haviland); Van Reenen (I. Trägårdh).

12<sub>1</sub>. Var. ***berthoudi*** (FOREL).

*Pachycondyla berthoudi* FOREL, 1901, Rev. Suisse Zool., IX, p. 344 (♀).

*Pachycondyla (Bothroponera) berthoudi* EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 76 (♀). FOREL, 1913, Rev. Zool. Afr., II, p. 306 (♀, ♂).

*Pachycondyla* (*Bothroponera*) *pumicosa* subsp. *berthoudi* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 109 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 63 (♀, ♂).

Type locality: Valdezia, TRANSVAAL (P. Berthoud).

CAPE PROVINCE: Willowmore (H. Brauns).

12. Var. *sculpturata* (SANTSCHI).

*Pachycondyla* (*Bothroponera*) *sculpturata* SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, p. 151 (♀).

Type locality: Zambésie, RHODESIA (Demarchi).

MOZAMBIQUE: (G. Vasse).

13. *Bothroponera sanguinea* (SANTSCHI).

*Pachycondyla* (*Bothroponera*) *sanguinea* SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 7 (♀).

Type locality: CONGO (obtained from Le Moult).

14. *Bothroponera silvestrii* (SANTSCHI).

*Pachycondyla* (*Bothroponera*) *silvestrii* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 313 (♀).

Type locality: Aburi, GOLD COAST (F. Silvestri).

15. *Bothroponera sjöstedti* (MAYR). See p. 74.

*Ponera sjöstedti* MAYR, 1896, Ent. Tidskr., XVII, p. 231 (♀, ♀, ♂).

*Pachycondyla* (*Bothroponera*) *sjöstedti* EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 45; 1911, 'Gen. Insect., Ponerinae,' p. 77 (♀, ♀, ♂).

*Pachycondyla* (*Bothroponera*) *sjöstedti* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 315, fig. 3 (♀).

Type locality: CAMEROON (Sjöstedt).

CAMEROON: Victoria (F. Silvestri); Mbalmajo to Ekeneli (G. Schwab). BELGIAN CONGO: Malela (J. Bequaert).

16. *Bothroponera soror* (EMERY). See p. 74.

*Ponera* (*Bothroponera*) *soror* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 472 (♀, ♀).

*Pachycondyla* (*Bothroponera*) *soror* EMERY, 1901, *ibid.*, XLV, p. 46. SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 350 (♀). STRITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 129 (♀, ♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 78 (♀, ♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 110 (♀); 1913, Rev. Zool. Afr., II, p. 306 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 59 (♀).

*Pachycondyla soror* BEQUAERT, 1913, Rev. Zool. Afr., II, p. 421.

Type locality: CAMEROON (Conradt).

TOGO: Bismarckburg (Conradt). CAMEROON: Metit (G. Schwab); Mundame (Conradt); Yaunde (Zenker). FRENCH CONGO: Brazzaville (A. Weiss). BELGIAN CONGO: Elisabethville; Sankisia (J. Bequaert); Akenge; Medje; Ngayu; Niangara; Avakubi; Niapu (Lang and Chapin). RHODESIA: Springvale; Bulawayo (G. Arnold).

16i. Var. *ancilla* (EMERY). See p. 74.

*Ponera* (*Bothroponera*) *soror* var. *ancilla* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 472 (♀).

*Pachycondyla* (*Bothroponera*) *soror* var. *ancilla* EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 46; 1911, 'Gen. Insect., Ponerinae,' p. 78 (♀).

Type locality: River Kuilu, FRENCH CONGO.

BELGIAN CONGO: Isangi (Lang and Chapin).

16a. Subsp. *suturalis* (FOREL).

*Pachycondyla* (*Bothroponera*) *soror* subsp. *suturalis* FOREL, 1907, Rev. d'Ent. Caen, XXVI, p. 133 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 78 (♀).

Type locality: KARSSA, ABYSSINIA (de Rothschild).

17. *Bothroponera strigulosa* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 19 (♀).

*Pachycondyla* (*Bothroponera*) *strigulosa* EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 45; 1911, 'Gen. Insect., Ponerinae,' p. 76 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 61 (♀).

Type locality: Kimberley, CAPE PROVINCE (E. Simon).

18. *Bothroponera talpa* ERN. ANDRÉ, 1890, Rev. d'Ent. Caen, IX, p. 316 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 37. See p. 73.

*Ponera* (*Bothroponera*) *talpa* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 473 (♀).

*Pachycondyla* (*Bothroponera*) *talpa* EMERY, 1901, *ibid.*, XLV, p. 45. SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 314 (♀).

Type locality: SIERRA LEONE (Mocquerys).

FRENCH GUINEA: Kakoulima (F. Silvestri). GOLD COAST: Aburi (F. Silvestri). CAMEROON. BELGIAN CONGO: Niapu; Niangara; Avakubi; Medje (Lang and Chapin).

18a. Subsp. *variolata* (SANTSCHI).

*Pachycondyla* (*Bothroponera*) *variolata* SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, p. 151 (♀).

*Pachycondyla* (*Bothroponera*) *talpa* subsp. *variolata* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 314.

Type locality: FRENCH CONGO (Zimmermann).

### **Phrynoponera** WM. M. WHEELER

*Phrynoponera* WM. M. WHEELER, 1920, Psyche, XXVII, p. 53.

Genotype: *Bothroponera gabonensis* ERN. ANDRÉ, 1892.

1. *Phrynoponera armata* (SANTSCHI).

*Pachycondyla* (*Bothroponera*) *armata* SANTSCHI, 1919, Rev. Zool. Afr., VII, p. 82 (♀).

Type locality: Kitempuka, BELGIAN CONGO (Gérard).

2. *Phrynoponera bequaerti* WM. M. WHEELER. See p. 79 (♀).

Type locality: Ngayu, BELGIAN CONGO (Lang and Chapin).

3. *Phrynoponera gabonensis* (ERN. ANDRÉ). See p. 76.

*Bothroponera gabonensis* ERN. ANDRÉ, 1892, Rev. d'Ent. Caen, XI, p. 50 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 36.

*Pachycondyla* (*Bothroponera*) *gabonensis* EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 45. STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 130, fig. 1 (♀, ♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 76 (♀).

Type locality: Gaboon, FRENCH CONGO.

BELGIAN CONGO: Kimpoko (Büttner); Bafwasende; Medje; Akenge (Lang and Chapin).

- 3<sub>1</sub>. Var. **esta** Wm. M. WHEELER. See p. 77 (♀, ♀).  
Type locality: Medje, BELGIAN CONGO (Lang and Chapin).  
BELGIAN CONGO: Gamangui; Ngayu (Lang and Chapin).
- 3<sub>2</sub>. Var. **fecunda** Wm. M. WHEELER. See p. 78 (♀, ♀).  
Type locality: Akenge, BELGIAN CONGO (Lang and Chapin).  
BELGIAN CONGO: Medje; Ngayu; Avakubi (Lang and Chapin).
- 3<sub>3</sub>. Var. **robustior** (SANTSCHI).  
*Pachycondyla* (*Bothroponera*) *gabonensis* var. *robustior* SANTSCHI, 1919, Rev. Zool. Afr., VII, p. 82 (♀).  
Type locality: Banalia, BELGIAN CONGO (J. Bequaert).
- 3<sub>4</sub>. Var. **striatidens** (SANTSCHI). See p. 78.  
*Pachycondyla* (*Bothroponera*) *gabonensis* var. *striatidens* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 315, fig. 4 (♀).  
Type locality: Victoria, CAMEROON (F. Silvestri).  
BELGIAN CONGO: Medje; Akenge; Ngayu (Lang and Chapin).
- 3<sub>5</sub>. Var. **umbrosa** Wm. M. WHEELER. See p. 78 (♀).  
Type locality: Medje, BELGIAN CONGO (Lang and Chapin).
4. **Phrynoponera heterodus** Wm. M. WHEELER. See p. 78 (♀).  
Type locality: Stanleyville, BELGIAN CONGO (Lang and Chapin).
5. **Phrynoponera sveni** (FOREL). See p. 79.  
*Pachycondyla* (*Bothroponera*) *sveni* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 398 (♀).  
Type locality: BELGIAN CONGO (Kohl).  
BELGIAN CONGO: Medje (Lang and Chapin).

### **Ectomomyrmex** MAYR

- Ectomomyrmex* MAYR, 1867, Tijdschr. v. Ent., X, p. 83.  
*Pachycondyla* subg. *Ectomomyrmex* EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 78.  
*Pachycondyla* (part) F. SMITH. *Bothroponera* (part) EMERY, FOREL. *Ponera* (part) ERN. ANDRÉ, FOREL.  
Genotype: *Ectomomyrmex javanus* Mayr, 1867.
1. **Ectomomyrmex brunoi** (FOREL).  
*Pachycondyla* (*Ectomomyrmex*) *brunoi* FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 205 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 53 (♀, ♂).  
Type locality: Bulawayo, RHODESIA (G. Arnold).

### **Euponera** FOREL

- Ponera* subg. *Euponera* FOREL, in Grandidier, 1891, 'Hist. Phys. Nat. Madagascar,' XX, 2, p. 126 (*sensu stricto*).  
*Euponera* EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 43 (*sensu latiore*).  
FOREL, 1901, *ibid.*, XLV, p. 141. EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 79.  
*Ponera* (part) F. SMITH, ROGER, MAYR, etc. *Formica* (part) FABRICIUS.  
Genotype: *Euponera sikoræ* Forel, 1891.

### Subgenus 1. **Mesoponera** EMERY

- Euponera* subg. *Mesoponera* EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 43; 1911, 'Gen. Insect., Ponerinae,' p. 80.

*Mesoponera* BINGHAM, 1903, 'Fauna Brit. India, Hym.,' II, p. 99.

*Ponera* subg. *Xiphopelta* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 108 (misspelled *Hiphopelta* on the same page).

*Euponera* subg. *Xiphopelta* FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 206.

*Pachycondyla* (part) MAYR, 1866, Verh. Zool. Bot. Ges. Wien, XVI, p. 890.

*Ponera* (part) F. SMITH, ROGER, MAYR, etc.

Subgenotype: *Ponera cafraria* F. Smith, 1858.

1. ***Euponera* (*Mesoponera*) *cafraria*** (F. SMITH) EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 46; 1911, 'Gen. Insect., Ponerinae,' p. 81 (♀, ♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 108 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 65 (♀, ♀, ♂), Pl. II, figs. 17, 17a and Pl. III, fig. 22.

*Ponera cafraria* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 91 (♀). ROGER, 1860, Berlin. Ent. Zeitschr., IV, p. 285; 1863, 'Verzeich. Formicid.,' p. 16. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 447; 1886, *ibid.*, XXXVI, p. 358. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 38. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 124 (♀, ♀). EMERY, 1899, Mem. Accad. Sc. Bologna, (5) VIII, p. 3 (larva), Pl. I, fig. 2.

*Ponera guineensis* ERN. ANDRÉ, 1890, Rev. d'Ent. Caen, IX, p. 318 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 39. EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 20.

*Mesoponera cafraria* DIXEY and LONGSTAFF, 1907, Trans. Ent. Soc. London, pp. 332 and 342 (♀).

*Euponera* (*Brachyponera*) *cafraria* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 350.

*Euponera* (*Mesoponera*) *cafra* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 315 (♀).

Type locality: Port Natal, NATAL.

FRENCH GUINEA: Kakoulima (F. Silvestri). SIERRA LEONE: (Mocquerys). CAMEROON: (H. Brauns). FRENCH CONGO: Brazzaville (A. Weiss). RHODESIA: Springvale (G. Arnold). BECHUANALAND: Serui (Dixey and Longstaff). TRANSVAAL: Pretoria (E. Simon). NATAL: (C. B. Cooper and Marley); Colenso (Dixey and Longstaff). CAPE PROVINCE: Willowmore (H. Brauns).

2. ***Euponera* (*Mesoponera*) *elisæ*** (FOREL). See p. 1008.

2a. Var. ***redbankensis*** (FOREL).

*Ponera* (*Xiphopelta*) *arnoldi* var. *redbankensis* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 109 (♀).

*Euponera* (*Mesoponera*) *elisæ* var. *redbankensis* ARNOLD, 1915, Ann. South African Mus., XIV, p. 71 (♀).

Type locality: Redbank, RHODESIA (G. Arnold).

2a. Subsp. ***divaricata*** EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 6, fig. 3 (♀).

Type locality: Keren, ERITREA (F. Silvestri).

ERITREA: Ghinda; Nefasit (F. Silvestri).

2b. Subsp. ***rotundata*** (EMERY) FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 206 (♀).

*Ponera elisæ* var. *rotundata* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 20 (♀).

*Euponera* (*Mesoponera*) *elisæ* var. *rotundata* EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 46; 1911, 'Gen. Insect., Ponerinae,' p. 81 (♀).

*Euponera (Mesoponera) elizæ* var. *rotundata* ARNOLD, 1915, Ann. South African Mus., XIV, p. 70 (♂, ♀).

*Ponera (Xiphopelta) arnoldi* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 108 (♀).

Type locality: Bloemfontein, ORANGE FREE STATE (E. Simon).

RHODESIA: Bulawayo (G. Arnold).

3. ***Euponera (Mesoponera) escherichi*** (FOREL) EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 3 (♀).

*Pachycondyla (Bothroponera) escherichi* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 244 (♀).

*Euponera (Mesoponera?) escherichi*, EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 82.

Type locality: Nefasit, ERITREA (K. Escherich; F. Silvestri).

4. ***Euponera (Mesoponera) fossigera*** MAYR. ARNOLD, 1915, Ann. South African Mus., XIV, p. 71 (♀), Pl. II, fig. 20.

*Euponera fossigera* MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 3 (♀).

*Euponera (Mesoponera?) fossigera* EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 82.

Type locality: Port Elizabeth, CAPE PROVINCE (H. Brauns).

5. ***Euponera (Mesoponera) havilandi*** (FOREL).

*Megaloponera (Hagensia) havilandi* FOREL, 1901, Rev. Suisse Zool., IX, p. 333 (♀); in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 3 (♀).

*Megaponera (Hagensia) havilandi* EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 69 (♀).

*Euponera (Mesoponera) sulcigera* MAYR, 1904, Verh. Zool. Bot. Ges. Wien, LIV, p. 593 (♀).

*Euponera havilandi* ARNOLD, 1915, Ann. South African Mus., XIV, p. 67 (♀, ♂).

Type locality: NATAL (Haviland, R. C. Wroughton).

NATAL: Durban (Wilms). CAPE PROVINCE: Knysna (H. Brauns)<sup>1</sup>; Grahams-town (Hewitt), King William's Town (R. Godfrey).

51. Var. ***fochi*** FOREL, 1918, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 155.

Type locality: Durban, NATAL.

6. ***Euponera (Mesoponera) ingesta*** WM. M. WHEELER, See p. 82 (♀).

Type locality: Akenge, BELGIAN CONGO (Lang and Chapin).

BELGIAN CONGO: Niapu; Faradje; Lubila (Lang and Chapin).

7. ***Euponera (Mesoponera) peringueyi*** EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 81. ARNOLD, 1915, Ann. South African Mus., XIV, p. 66 (♀), Pl. II, fig. 19.

*Ponera peringueyi* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 474 (♀).

*Euponera (Brachyponera) peringueyi* EMERY, 1901, *ibid.*, XLV, p. 47.

Type locality: Nord Hook, CAPE PROVINCE (L. Péringuey).

CAPE PROVINCE: Saldanha Bay (L. Péringuey).

8. ***Euponera (Mesoponera) scolopax*** EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 46; 1911, 'Gen. Insect., Ponerinae,' p. 81. Stirtz, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 371 (♀).

*Ponera scolopax* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 473 (♀).

Type locality: CAMEROON (Conradt).

BELGIAN CONGO: Libenge (Schubotz).

<sup>1</sup>Specimens received from Dr. H. Brauns.

9. **Euponera (Mesoponera) senegalensis** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 815, fig. 5 (♀).  
*Euponera (Xiphopelta) senegalensis* EMERY, 1915, *ibid.*, X, p. 7.  
 Type locality: Thiès, SENEGAMBIA (F. Silvestri).
10. **Euponera (Mesoponera) subiridescens** WM. M. WHEELER. See p. 83 (♀).  
 Type locality: Akenge, BELGIAN CONGO (Lang and Chapin).  
 BELGIAN CONGO: Medje; Ngayu (Lang and Chapin).

### Subgenus 2. **Brachyponera** EMERY

- Euponera* subg. *Brachyponera* EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 43; 1911, 'Gen. Insect., Ponerinae,' p. 83.  
*Brachyponera* BINGHAM, 1903, 'Fauna Brit. India, Hym.,' II, p. 101.  
*Pachycondyla* (part) ERN. ANDRÉ, 1890, Rev. d'Ent. Caen, IX, p. 316.  
*Ponera* (part) ROGER, MAYR, F. SMITH, EMERY, FOREL.  
 Subgenotype: *Ponera sennaarensis* Mayr, 1862.
11. **Euponera (Brachyponera) ambigua** (ERN. ANDRÉ) EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, pp. 47 and 49; 1911, 'Gen. Insect., Ponerinae,' p. 84.  
*Pachycondyla ambigua* ERN. ANDRÉ, 1890, Rev. d'Ent. Caen, IX, p. 316 (♀).  
 DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 32.  
 Type locality: SIERRA LEONE (Mocquers).
12. **Euponera (Brachyponera) sennaarensis** (MAYR) EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 47. FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 75 (♀); 1907, Ann. Mus. Nat. Hungarici, V, p. 5 (♀). MAYR, 1907, Sitzb. Ak. Wiss. Wien, math. naturw. Kl., CXVI, Abt. 1, p. 387. SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 350 (♀, ♀). FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 245 (♀, ♀, ♂). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 130 (♀). FOREL, 1911, Rev. Zool. Afr., II, p. 307 (♀). KARAWAIEW, 1911, Rev. Russe Ent., XI, p. 3 (♀, ♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 84 (♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, pp. 108 (♀, ♀) and 347 (♀, ♂). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 50 (♀, ♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 318. ARNOLD, 1915, Ann. South African Mus., XIV, p. 72 (♀, ♀, ♂), Pl. II, fig. 21. EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 3 (♀, ♀). STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 372 (♀). See p. 84.
- Ponera sennaarensis* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 721 (♀); 1863, *ibid.*, XIII, p. 450. ROGER, 1863, 'Verzeich. Formicid.,' p. 16. MAYR, 1878, Verh. Zool. Bot. Ges. Wien, XXVIII, p. 662 (♀). EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 366 (♀). MAGRETTI, 1884, *ibid.*, XXI, p. 338 (♀). EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), p. 557 (♀); 1881, Ann. Mus. Civ. Genova, XVI, p. 528; 1892, *ibid.*, XXXII, p. 111 (♀, ♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 42. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 75. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 125. EMERY, 1895, Ann. Soc. Ent. Belgique, XXXIX, p. 337; 1895, Ann. Mus. Civ. Genova, XXXV, p. 177; 1897, *ibid.*, XXXVIII, p. 597; 1899, Ann. Soc. Ent. Belgique, XLIII, p. 474.
- Ponera sorghi* ROGER, 1863, Berlin. Ent. Zeitschr., VII, p. 169 (♀); 1863, 'Verzeich. Formicid.,' p. 16. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 450.



*Ponera senaarensis* MAGRETTI, 1884, Bull. Soc. Ent. Italiana, XV, (1883), p. 244 (♀). WASMANN, 1894, 'Verzeichn. Myrmecoph. Termitoph. Arthrop.', pp. 202 and 221.

?*Ponera senaarensis* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 474.

*Euponera senaarensis* MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicid.,' p. 2. BEQUAERT, 1913, Rev. Zool. Afr., II, p. 421. ARNOLD, 1913, Proc. Rhodesia Sc. Assoc., XII, p. 13.

*Euponera (Brachyponera) sorghi* EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 84 (♀).

Type locality: Sennar, ANGLO-EGYPTIAN SUDAN.

SENEGAMBIA: Dakar (C. Alluaud); Thiès (F. Silvestri). FRENCH GUINEA: Konakry; Kindia; Kakoulina (F. Silvestri). SIERRA LEONE: Samlia Falls, River N'Gamie (Mocquers). GOLD COAST: Kitta; Akra. SOUTHERN NIGERIA: Ibadan; Olokemeji (F. Silvestri). CAMEROON: Metit; Mbalmajo to Ekeneli (G. Schwab). SPANISH GUINEA: Alen (Tessmann). FRENCH CONGO: Cape Lopez; Brazzaville; Mindouli (A. Weiss); Fort Crampel (Schubotz). BELGIAN CONGO: Leopoldville (J. Maes); Avakubi; Niapu; Stanleyville; Medje; Faradje; Thysville; Zambi (Lang and Chapin); Bukama (J. Bequaert). RHODESIA: Bulawayo (G. Arnold). UGANDA: Unyoro Province, region of Lake Albert, Kadjura (C. Alluaud); Gondokoro (F. Werner). BRITISH EAST AFRICA: Voi, Taita district (Alluaud and Jeannel). GERMAN EAST AFRICA: Pemba Island; Fundu Island (Voeltzkow). SOMALILAND: Lower Ganana (V. Bottego); Obbia; Mogadiscio; Gubbet-(Bricchetti-Robecchi). ABYSSINIA: Bela; Ogaden (Ruspoli); Sciotel (Beccari); southern Abyssinia (Ilg); Webi (Bricchetti-Robecchi). ERITREA: Kor Lebka (Magretti); Nefasit; Ghinda (K. Escherich); Keren; Ghinda (F. Silvestri). ANGLO-EGYPTIAN SUDAN: Khartum (I. Trägårdh; Karawaiew); White Nile (Gredler); Kassala; Bahr-el-Salaam (Magretti). ARABIA: Mascat (Biro); Aden; Tes; Cheik Isman (Doria and Beccari).

12. Var. *ruginota* STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 372 (♀).

Type locality: Yaunde, CAMEROON (v. Sommerfeld).

### Subgenus 3. *Trachymesopus* EMERY

*Euponera* subg. *Trachymesopus* EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 84.

*Pachycondyla* subg. *Pseudoponera* (part) EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 42.

*Euponera* subg. *Pseudoponera* (part) FOREL, 1901, Ann. Soc. Ent. Belgique, XLV, p. 141.

*Pseudoponera* (part) BINGHAM, 1903, 'Fauna Brit. India, Hym.,' II, p. 91.

Subgenotype: *Formica stigma* Fabricius, 1804.

13. *Euponera (Trachymesopus) darwini* (FOREL) EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 86. See p. 1009.

*Belonopelta darwini* FOREL, 1893, Ann. Soc. Ent. Belgique, XXXVII, p. 460 (♀).

Type locality: Port Darwin, AUSTRALIA.

13. Var. *africana* FOREL, EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 86. SANTSCI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 318 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 51 (♀). See p. 85.

*Euponera (Pseudoponera) darwini* var. *africana* FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 51 (♀).

Type locality: Luki, BELGIAN CONGO (A. Jullien).

SOUTHERN NIGERIA: Lagos (F. Silvestri). BRITISH EAST AFRICA: Taveta (Alluaud and Jeannel). BELGIAN CONGO: Stanleyville (Lang and Chapin).

14. **Euponera (Trachymesopus) lamarki** SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 303 (♀).

Type locality: Southern Darbanda, FRENCH CONGO (Decorse).

15. **Euponera (Trachymesopus) nigeriensis** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 316 (♀).

Type locality: Olokemeji, NIGERIA (F. Silvestri).

GOLD COAST: Aburi (F. Silvestri).

16. **Euponera (Trachymesopus) suspecta** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 51, fig. 1 (♀).

Type locality: New Moschi, Mt. Kilimanjaro, 800 m., GERMAN EAST AFRICA (Alluaud and Jeannel).

17. **Euponera (Trachymesopus) wroughtoni** FOREL. EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 85 (♀, ♂). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 52 (♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 75 (♀, ♂), Pl. II, fig. 18.

*Euponera (Pseudoponera) wroughtoni* FOREL, 1901, Rev. Suisse Zool., IX, p. 341 (♀, ♂).

Type locality: NATAL (R. C. Wroughton).

CAPE PROVINCE: Knysna (H. Brauns). BRITISH EAST AFRICA: Voi, Wa-Taita District (C. Alluaud); Tiwi (Alluaud and Jeannel).

17. Var. **crudelis** FOREL. EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 85 (♀, ♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 76 (♀, ♂).

*Euponera (Pseudoponera) wroughtoni* var. *crudelis* FOREL, 1901, Rev. Suisse Zool., IX, p. 341 (♀, ♂).

Type locality: NATAL (Haviland).

### **Pseudoponera EMERY**

*Pachycondyla* subg. *Pseudoponera* (part) EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 42.

*Pseudoponera* EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 86.

Genotype: *Ponera amblyops* Emery, 1887.

### **Subgenus Promyopias SANTSCHI**

*Myopias* subg. *Promyopias* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 323.

*Promyopias* EMERY, 1915, *ibid.*, X, p. 26.

Subgenotype: *Myopias (Promyopias) silvestrii* Santschi, 1914.

1. **Pseudoponera (Promyopias) asili** (CRAWLEY).

*Promyopias asili* CRAWLEY, 1916, Entomologist, XLIX, p. 30, fig. (♀).

Type locality: NYASALAND (S. A. Neave).

2. **Pseudoponera (Promyopias) silvestrii** (SANTSCHI).

*Myopias (Promyopias) silvestrii* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 324, fig. 10 (♀).

*Promyopias silvestrii* EMERY, 1915, *ibid.*, X, p. 26, fig. 13b (♀).

Type locality: Mamou, FRENCH CONGO (F. Silvestri).

**Cryptopone EMERY**

*Cryptopone* EMERY, 1892, Ann. Soc. Ent. France, LXI, C. R., p. cclxxv; 1911, 'Gen. Insect., Ponerinae,' p. 88.

?*Amblyopone* (part) MOTSCHULSKY, 1863, Bull. Soc. Nat. Moscou, XXXVI, p. 15.

Genotype: *Amblyopone* (?) *testacea* Motschulsky, 1863.

1. ***Cryptopone angustata*** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 319, fig. 7 (♀).

Type locality: Kakoulima, FRENCH GUINEA (F. Silvestri).

**Ponera LATREILLE<sup>1</sup>**

*Ponera* LATREILLE, 1805, 'Hist. Nat. Crust. Ins.,' XIII, p. 257. EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 41; 1911, 'Gen. Insect., Ponerinae,' p. 88.

*Ponera* (part) LATREILLE, 1809, 'Gen. Crust. Ins.,' IV, p. 128.

*Formica* (part) LATREILLE, 1802, 'Hist. Nat. Fourmis,' p. 195.

*Bothroponera* (part) FOREL, 1900, Journ. Bombay Nat. Hist. Soc., XIII, p. 322.

Genotype: *Formica coarctata* Latreille, 1802.

1. ***Ponera abeillei*** ERN. ANDRÉ, 1881, Ann. Soc. Ent. France, (6) I, C. R., p. xlviii (♀).

Type locality: Ajaccio, CORSICA.

1. Var. ***cammerunensis*** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 321 (♀).

Type locality: Victoria, CAMEROON (F. Silvestri).

2. ***Ponera coarctata*** (LATREILLE) DALLA TORRE, 1892, Wien. Ent. Zeitg., XI, p. 93.

*Formica coarctata* LATREILLE, 1802, Bull. Soc. Philomath. Paris, III, p. 65 (♀, ♀), Pl. III, fig. 1.

Type locality: "Jardin du Luxembourg, près de Gentilly," FRANCE (Latreille).

The typical form is found in Southern Europe (northward to Paris), the Mediterranean subregion and the Caucasus.

2a. Subsp. ***boerorum*** FOREL, 1901, Rev. Suisse Zool., IX, p. 339 (♀); 1907, Ann. Mus. Nat. Hungarici, V, p. 2 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 90 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 83 (♀).

Type locality: NATAL, 1600 m. (Haviland).

GERMAN EAST AFRICA: Kibosho (Katona).

2a<sub>1</sub>. Var. ***æmula*** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 53 (♀).

*Ponera dulcis* var. *æmula* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXIX, p. 351 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 90 (♀).

Type locality: Kibosho, Mt. Kilimanjaro, 1400 m., GERMAN EAST AFRICA (C. Alluaud).

GERMAN EAST AFRICA: Tanga, cave C (C. Alluaud).

2b. Subsp. ***natalensis*** SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 7 (♀).

Type locality: Richmond, NATAL (I. Trägårdh).

<sup>1</sup>*Ponera denticulata* F. Smith, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 90 (♀), Pl. vi, figs. 13 and 14, was described by error from the "Cape of Good Hope." It is a synonym of the Malayan *Odontoponera transversa* (F. Smith).

3. ***Ponera coeca*** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 322, fig. 9 (♀, ♀). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 397 (♀).

Type locality: Victoria, CAMEROON (F. Silvestri).

BELGIAN CONGO: St. Gabriel (Kohl).

4. ***Ponera dideroti*** FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 203 (♀, ♀, ♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 78 (♀, ♀, ♂).

Type locality: Knysna, CAPE PROVINCE (H. Brauns).

5. ***Ponera dulcis*** FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 2 (♀); 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 245 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 90 (♀). FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 203 (♀); 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 213 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 53, fig. 2 (♀). ALLUAUD and JEANNEL, 1914, Arch. Zool. Gén. Exp., LIII, p. 366. ARNOLD, 1915, Ann. South African Mus., XIV, p. 82 (♀, ♀).

Type locality: Arusha-chini, GERMAN EAST AFRICA (Katona).

NATAL: Durban (Marley). RHODESIA: Bulawayo (G. Arnold). GERMAN EAST AFRICA: New Moschi, Mt. Kilimanjaro, 800 m. (Alluaud and Jeannel). BRITISH EAST AFRICA: Cave A, Shimoni (C. Alluaud). ERITREA: Nefasit (K. Escherich).

5i. Var. ***uncta*** SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 7 (♀).

Type locality: Dukudu, ZULULAND (I. Trägårdh).

6. ***Ponera ergatandria*** FOREL, 1893, Trans. Ent. Soc. London, p. 365 (♀, ♀, ♂). EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 44. WHEELER, 1908, Bull. American Mus. Nat. Hist., XXIV, p. 125 (♀, ♀, ♂). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 92. SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, p. 154. FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 213 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 53 (♀).

Type locality: St. Vincent, WEST INDIES (H. Smith).

CANARY ISLANDS: Teneriffe. NATAL: Durban (Marley). BRITISH EAST AFRICA: Shimoni (Alluaud and Jeannel).

Tropicopolitan; introduced in hothouses of temperate regions.

6a. Subsp. ***cognata*** SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, p. 153 (♀). FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 203 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 81 (♀).

Type locality: Cucala, BENGUELA (J. Cruchet).

RHODESIA: Bulawayo (G. Arnold).

6b. Subsp. ***petri*** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 397 (♀).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

7. ***Ponera gleadowi*** FOREL, in Emery, 1895, Mem. Accad. Sc. Bologna, (5) V, p. 292, footnote (♀).

Type locality: Poona, INDIA (R. C. Wroughton).

7a. Subsp. ***aethiopica*** FOREL, 1907, Rev. d'Ent. Caen, XXVI, p. 132 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 91. ARNOLD, 1915, Ann. South African Mus., XIV, p. 83 (♀).

Type locality: Tchafianani, southern ABYSSINIA (de Rothschild).

CAPE PROVINCE: Willowmore (H. Brauns).

8. ***Ponera inaudax*** SANTSCHI, 1919, Rev. Zool. Afr., VII, p. 83 (♀).

Type locality: Yambuza, BELGIAN CONGO (J. Bequaert).

9. **Ponera incisa** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 320, fig. 8 (♀).

Type locality: Lagos, SOUTHERN NIGERIA (F. Silvestri).

10. **Ponera myrmicarise** WASMANN, 1918, Ent. Mitt. Deutsch. Ent. Mus. Berlin, VII, p. 144 (♀).

Type locality: Soppo, CAMEROON (v. Rothkirch).

11. **Ponera orba** EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 7, fig. 4 (♀).

Type locality: Ghinda, ERITREA (F. Silvestri).

12. **Ponera punctatissima** (part?) ROGER, 1859, Berlin. Ent. Zeitschr., III, p. 246 (♀, ♀). FOREL, 1874, 'Fourmis de la Suisse,' pp. 64, 66 (♀, ♀, ♂). ERN. ANDRÉ, 1882, 'Spec. Hym. Europ. Algérie,' II, pp. 241, 242, 245 (♀, ♀, ♂), Pl. XIV, figs. 15, 16. EMERY, 1895, Mem. Accad. Sc. Bologna, (5) V, p. 294, figs. 9, 10 (♀, ♀); 1901, Ann. Soc. Ent. Belgique, XLV, p. 44; 1909, Deutsch. Ent. Zeitschr., p. 373, fig. 11 (♀, ♀, ♂); 1911, 'Gen. Insect., Ponerinae,' p. 91, Pl. III, fig. 5. SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 320 (♀). See p. 1009.

*Ponera androgyna* ROGER, 1859, Berlin. Ent. Zeitschr., III, p. 254, footnote (♂).

*Ponera contracta* (part) MEINERT, 1860, Danske Vidensk. Selsk. Skrift., naturv. math. Afd., (5) V, p. 322 (♀; nec ♀, ♂).

*Ponera tarda* CHARLALEY, 1877, Ent. Monthly Mag., XIV, p. 162.

Type locality: Rauden, GERMANY (in hothouses).

FRENCH GUINEA: Konakry (F. Silvestri). NIGERIA: Olokemeji; Lagos (F. Silvestri).

13. **Ponera ragsuae** EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 91. See p. 1010.

*Ponera ragsuai* EMERY, 1894, Il Naturalista Siciliano, XIV, p. 28 (♀); 1895, Mem. Accad. Sc. Bologna, (5) V, pp. 292, 297, fig. 18 (♀); 1901, Ann. Soc. Ent. Belgique, XLV, p. 44. FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 2 (♀). SANTSCHI, 1908, Ann. Soc. Ent. France, LXXVII, p. 519 (♀, ♂). EMERY, 1909, Deutsch. Ent. Zeitschr., p. 370, fig. 9a (♀).

Type locality: SICILY (Ragusa).

EGYPT: Cairo (Borcard). GERMAN EAST AFRICA: Boma Gombe (Katona).

- 13<sub>1</sub>. Var. **sordida** (SANTSCHI).

*Ponera ragsuai* var. *sordida* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 54 (♀).

Type locality: Shimoni, BRITISH EAST AFRICA (Alluaud and Jeannel).

- 13a. Subsp. **bulawayensis** (FOREL) ARNOLD, 1915, Ann. South African Mus., XIV, p. 80 (♀).

*Ponera ragsuai* subsp. *bulawayensis* FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 203 (♀).

Type locality: Bulawayo, RHODESIA (G. Arnold).

14. **Ponera rothkirchi** WASMANN, 1918, Ent. Mitt. Deutsch. Ent. Mus. Berlin, VII, p. 145 (♀).

Type locality: Soppo, CAMEROON (v. Rothkirch).

15. **Ponera spei** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 423 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 92 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 77 (♀).

Type locality: Mountains of NATAL (R. C. Wroughton).

CAPE PROVINCE: Algoa Bay (H. Brauns).

- 15a. Subsp. **devota** SANTSCHI, 1913, Med. Göteborgs Mus. Zool. Afd., III, p. 5 (♀).  
 Type locality: Richmond, NATAL (I. Trägårdh).  
 15a<sub>1</sub>. Var. **sancta** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 213 (♀).  
 Type locality: Durban, NATAL (G. Arnold).  
 16. **Ponera sulcatinasis** SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 4 (♀, ♀).  
 Type locality: Richmond, NATAL (I. Trägårdh).  
 16a. Subsp. **durbanensis** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 213 (♀).  
 Type locality: Durban, NATAL (G. Arnold).  
 17. **Ponera trægaordhi** SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 6 (♀).  
 Type locality: Pietermaritzburg, NATAL (I. Trägårdh).

### Asphinctopone SANTSCHI

- Asphinctopone* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 318.  
 Genotype: *Asphinctopone silvestrii* Santschi, 1914.  
 1. **Asphinctopone silvestrii** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 318, fig. 6 (♀).  
 Type locality: Olokemeji, NIGERIA (F. Silvestri).

### Plectroctena F. SMITH

- Plectroctena* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 101. EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 94.  
*Formica* (part) SPINOLA, 1853, Mem. Accad. Sc. Torino, XIII, p. 79.  
 Genotype: *Plectroctena mandibularis* F. Smith, 1858.  
 1. **Plectroctena cristata** EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 470 (♀). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 129 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 95 (♀). See p. 88.  
 Type locality: CAMEROON (Conradt).  
 Togo: (Conradt; Schröder). CAMEROON: Mundame (Conradt); Barombi (Preuss). FERNANDO PO: (Conradt). BELGIAN CONGO: Medje; Akenge (Lang and Chapin).  
 2. **Plectroctena gabonensis** SANTSCHI, 1919, Bull. Soc. Vaudoise Sci. Nat., (5) LII, p. 336 (♀).  
 Type locality: Libreville, FRENCH CONGO (Chalot).  
 FRENCH CONGO: Samkita (F. Faure).  
 3. **Plectroctena mandibularis** F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 101 (♀, ♂), Pl. VII, figs. 1-5. GERSTÄCKER, 1871, Arch. f. Naturg., XXXVII, 1, p. 355; 1873, in 'v. d. Decken's Reisen in Ost Afrika, Gliederthiere,' p. 346. EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 19. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 124. EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 469 (♀ erg.). MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 18. EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 95 (♀, ♂), Pl. III, fig. 7; 1912, Annuar. Mus. Zool. Univ. Napoli, N. S., III, No. 26, p. 2 (♀). FOREL, 1913, Ann. Soc. Ent.

Belgique, LVII, p. 108 (♀); 1913, Rev. Zool. Afr., II, p. 308 (♀); 1913, Rev. Suisse Zool., XXI, p. 666 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 54 (♀, ♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 86 (♀, ♀ erg., ♂).

*Ponera caffra* (KLUG) SPINOLA, 1853, Mem. Accad. Sc. Torino, XIII, p. 69 (without description). EMERY, 1893, Boll. Mus. Zool. Anat. Comp. Torino, VIII, No. 163, p. 2.

*Plectroctena caffra* ROGER, 1861, Berlin. Ent. Zeitschr., V, p. 41 (♀, ♀, ♂); 1863, 'Verzeich. Formicid.,' p. 19. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 442. EMERY, 1891, Ann. Soc. Ent. France, LX, p. 556 (♀), Pl. xv, figs. 3, 4. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 31. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 74. DIXEY and LONGSTAFF, 1907, Trans. Ent. Soc. London, p. 336. ZAVATTARI, 1909, 'Il Ruwenzori, Parte Scientif.,' I, p. 213 (♂). FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 51 (♀); in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 3 (♀, ♂); 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 361 (♀).

*Plectroctena caffra* subsp. *major* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 74 (♀ erg.).

*Plectroctena caffra* H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 41.

*Plectroctena mandibularis* var. *major* EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 95. SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 8 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 54 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 86 (♀, ♀ erg., ♂).

Type locality: Port Natal, NATAL (Gueinzius).

CAMEROON: (Conradt). BELGIAN CONGO: Katanga (Lemaire); valley of the Lubumbashi (Buttgenbach). RHODESIA: Bulawayo (G. Arnold); Luapula River (Elena d'Aosta). GERMAN SOUTHWEST AFRICA: (Lübbert). KALAHARI Desert (L. Schultze). ORANGE FREE STATE. CAPE PROVINCE: Cape Town (Wilms); Mafeking (L. Schultze). NATAL: Durban (Wilms). TRANSVAAL: Makapan (E. Simon); Valdezia (Creux and P. Berthoud); Johannesburg (Dixey and Longstaff). ZULULAND: Umfolosi (I. Trägårdh). DELAGOA: (P. Berthoud). GERMAN EAST AFRICA: Kibonoto, Kilimanjaro (Sjöstedt); Lake Tanganyika (Reichardt); Moschi, Mt. Kilimanjaro, 1120 m. (Alluaud and Jeannel). BRITISH EAST AFRICA: Wanga (v. d. Döcken); Nairobi (H. Prell); Fort Hall; Nairobi; Bura, Wa-Taita; River Tchania (Alluaud and Jeannel); Samburu, Wa-Nyika District (C. Alluaud). UGANDA: Ibanda (Duke of Abruzzi).

3. Var. *strigosa* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 469 (♀); 1911, 'Gen. Insect., Ponerinæ,' p. 95 (♀). FOREL, 1912, Ent. Mitt. Deutsch. Ent. Mus. Berlin, I, p. 81 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 88 (♀).

Type locality: NATAL.

Changmane, Africa.

4. *Plectroctena minor* EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), p. 556 (♀), Pl. xv, figs. 1, 2. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 31. EMERY, 1902, Rend. Accad. Sc. Bologna, N. S., VI, p. 32 (♀, ♀); 1911, 'Gen. Insect., Ponerinæ,' p. 95 (♀, ♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 325. FOREL, 1916, Rev. Suisse Zool., XXIV, p. 398 (♀, ♀). See p. 88 (♀ ergat., ♂).

Type locality: Assinie, IVORY COAST (C. Alluaud).

SIERRA LEONE. GOLD COAST: Aburi (F. Silvestri). CAMEROON: Victoria (F. Silvestri). FERNANDO PO: (Conradt). BELGIAN CONGO: St. Gabriel (Kohl); Akenge; Stanleyville; Niapu (Lang and Chapin).

4. Var. **dentata** SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, p. 150; 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 54 (♀).

*Plectroctena minor* SANTSCHI, 1911, Rev. Zool. Afr., I, p. 205 (♀).

Type locality: BENGUELA (J. Cruchet).

UGANDA: Ibanda, Mt. Ruwenzori, 1400 m. (C. Alluaud).

4a. Subsp. **conjugata** SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 8 (♀).

Type locality: Stamford Hill, NATAL (I. Trägårdh).

NATAL: Charlestown (I. Trägårdh). ZULULAND: (I. Trägårdh).

### **Myopias** ROGER

*Myopias* ROGER, 1861, Berlin. Ent. Zeitschr., V, p. 39.

Genotype: *Myopias amblyops* Roger, 1861.

1. **Myopias subterranea** (ARNOLD).

*Plectroctena subterranea* ARNOLD, 1915, Ann. South African Mus., XIV, p. 84 (♀, ♀), Pl. III, figs. 23, 23a.

Type locality: Bulawayo, RHODESIA (G. Arnold).

RHODESIA: Shiloh (G. Arnold).

1a. Subsp. **gabonensis** (SANTSCHI).

*Plectroctena subterranea* subsp. *gabonensis* SANTSCHI, 1919, Rev. Zool. Afr., VII, p. 90 (♀).

Type locality: Gaboon, FRENCH CONGO (F. Faure).

### **Psalidomyrmex** ERN. ANDRÉ

*Psalidomyrmex* ERN. ANDRÉ, 1890, Rev. d'Ent. Caen, IX, p. 313. EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 95.

Genotype: *Psalidomyrmex foveolatus* ERN. ANDRÉ, 1890.

1. **Psalidomyrmex foveolatus** ERN. ANDRÉ, 1890, Rev. d'Ent. Caen, IX, p. 314 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 31. STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 129 (♀, ♂). EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 96 (♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 325 (♀).

Type locality: SIERRA LEONE (Mocquerys).

FRENCH GUINEA: Kakoulima (F. Silvestri). CAMEROON: (Conradt); Bibundi (Tessmann).

2. **Psalidomyrmex longiscapus** SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 8 (♀).

Type locality: Samkita, FRENCH CONGO (F. Faure).

3. **Psalidomyrmex obesus** WM. M. WHEELER. See p. 92 (♀).

Type locality: Medje, BELGIAN CONGO (Lang and Chapin).

4. **Psalidomyrmex procerus** EMERY, 1901, Ann. Soc. Ent. Belgique, XLV, p. 50 (♀). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 129 (♀). EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 96, Pl. III, fig. 8. See p. 90.

*Psalidomyrmex foveolatus* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 471 (♀, ♂) (nec André).

Type locality: CAMEROON (Conradt).



Togo: Bismarckburg (Conradt). CAMEROON: Mundame (Conradt). BELGIAN CONGO: Medje; Akenge; Niapu (Lang and Chapin).

5. *Psalidomyrmex reichenspergeri* SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 302 (♀); 1914, Deutsch. Ent. Zeitschr., p. 288 (♂). See p. 90.

Type locality: Molundu, CAMEROON (Reichensperger).

CAMEROON: Soppo (v. Rothkirch). BELGIAN CONGO: Akenge (Lang and Chapin).

### **Cacopone SANTSCHI**

*Cacopone* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 325.

Genotype: *Cacopone hastifer* Santschi, 1914.

1. *Cacopone hastifer* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 325, fig. 11 (♀).

Type locality: Aburi, GOLD COAST (F. Silvestri).

### **Leptogenyini Forel**

#### **Leptogenys ROGER**

*Leptogenys* ROGER, 1861, Berlin. Ent. Zeitschr., V, p. 41 (*sensu stricto*).

*Leptogenys* MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 198 (*sensu latiore*). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 97.

*Lobopella* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 733.

*Ponera* (part) JERDON, F. SMITH, ROGER, BUCKLEY.

Genotype: *Leptogenys falcigera* Roger, 1861.

#### **Subgenus 1. *Leptogenys* ROGER, *sensu stricto*<sup>1</sup>**

Subgenotype: same as genotype.

1. *Leptogenys bellii* EMERY, 1901, Bull. Soc. Ent. Italiana, XXXIII, p. 59 (♀); 1911, 'Gen. Insect., Ponerinae,' p. 99 (♀).

Type locality: Ghinda, ERITREA (Bellii).

2. *Leptogenys conradti* FOREL, 1913, Rev. Suisse Zool., XXI, p. 666 (♀).

Type locality: CAMEROON (Conradt).

3. *Leptogenys cribrata* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 20 (♀); 1911, 'Gen. Insect., Ponerinae,' p. 99 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 91 (♀).

Type locality: Vrijburg, CAPE PROVINCE (E. Simon).

4. *Leptogenys crustosa* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 326, fig. 12 (♀).

Type locality: Konakry, FRENCH GUINEA (F. Silvestri).

5. *Leptogenys ferrarii* FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 209 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 94 (♀).

Type locality: Bulawayo, RHODESIA (G. Arnold).

5a. Subsp. *dentatula* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 246 (♀).

Type locality: Katakai, BELGIAN CONGO (Gérard).

<sup>1</sup>According to Forel, 1901, Mitt. Naturh. Mus. Hamburg, XVIII, p. 81, *Leptogenys pruinosa* Forel, originally described from Ceylon, was found at Hamburg in wood imported from East Africa.

6. *Leptogenys jeanneli* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 55, fig. 3 (♀). ALLUAUD and JEANNEL, 1914, Arch. Zool. Gén. Exp., LIII, p. 375.

Type locality: Cave B, Kulumuzi, Tanga, GERMAN EAST AFRICA (Alluaud and Jeannel).

7. *Leptogenys longiceps* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 328, fig. 13 (♀).

Type locality: Dakar, SENEGAMBIA (F. Silvestri).

8. *Leptogenys maxillosa* (F. SMITH) ROGER, 1861, Berlin. Ent. Zeitschr., V, p. 43 (♀); 1863, 'Verzeich. Formicid.,' p. 19. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 426; 1886, *ibid.*, XXXVI, p. 358. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 46. EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 99. FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 110 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 89 (♀, ♂), Pl. III, fig. 24. See p. 1011.

*Ponera maxillosa* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 93 (♀, ♂).

Type locality: MAURITIUS (Beke).

RHODESIA: Bulawayo (G. Arnold). MALAGASY REGION. WEST INDIES: St. Thomas.

9. *Leptogenys pavesii* EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 111 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 46. EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 99 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 55 (♀). LAMBORN, 1920, Trans. Ent. Soc. London, (1919), Proc., pp. liv and lv.

Type locality: Obbia, SOMALILAND (Bricchetti-Robecchi).

BRITISH EAST AFRICA: Shimoni (Alluaud and Jeannel); Voi (Alluaud). SOMALILAND: Erdal (Pavesi). GERMAN EAST AFRICA: Lindi (Lamborn).

10. *Leptogenys schwabi* FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 208 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 93 (♀).

Type locality: Bulawayo, RHODESIA (G. Arnold).

11. *Leptogenys stuhlmanni* MAYR. H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 39. FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 51 (♂). EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 100 (♀). FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 214 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 55 (♀, ♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 91 (♀). LAMBORN, 1920, Trans. Ent. Soc. London, (1919), Proc., p. lv.

*Leptogenys (Lobopelta) stuhlmanni* MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 198 (♀).

Type locality: Quillimane, MOZAMBIQUE (Stuhlmann).

NATAL: Durban (G. Arnold). BRITISH EAST AFRICA: Mombasa (C. Alluaud); Shimoni; Tiwi; Likoni; Cheteni (Alluaud and Jeannel). NORTH EAST AFRICA: (von Erlanger). GERMAN EAST AFRICA: Lindi (Lamborn).

11a. Subsp. *camerunensis* (STITZ) FOREL, 1916, Rev. Suisse Zool., XXIV, p. 400.

*Leptogenys camerunensis* STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 130 (♀). FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 421. EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 99 (♀).

Type locality: Barombi, CAMEROON (Preuss).

11a<sub>1</sub>. Var. *angusticeps* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 399 (♀).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

11a<sub>2</sub>. Var. *opalescens* WM. M. WHEELER. See p. 94 (♀).

Type locality: Akenge, BELGIAN CONGO (Lang and Chapin).

11b. Subsp. *erythræa* EMERY, 1902, Rend. Accad. Sc. Bologna, N. S., VI, p. 33 (♀). FOREL, 1907, Rev. d'Ent. Caen, XXVI, p. 131 (♀, ♂); 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 247 (♀). EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 100 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 92 (♂).

*Leptogenys stuhlmanni* EMERY, 1901, Bull. Soc. Ent. Italiana, XXXIII, p. 60 (♀) (nec Mayr).

Type locality: Ghinda, ERITREA (Belli).

ERITREA: Nefasit (K. Escherich). ABYSSINIA: Bourka (de Rothschild).

### Subgenus 2. *Lobopelta* (MAYR)

*Lobopelta* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 733.

*Leptogenys* subg. *Lobopelta* EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 101.

Subgenotype: *Ponera diminuta* F. Smith, 1857.

12. *Leptogenys (Lobopelta) arnoldi* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 110 (♀, ♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 99 (♀, ♂), Pl. III, figs. 27, 27a, and 28.

Type locality: Plumtree, RHODESIA (G. Arnold).

13. *Leptogenys (Lobopelta) attenuata* (F. SMITH) MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 124 (♀). EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 102 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 97 (♀, ♂).

*Ponera attenuata* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 91 (♀). ROGER, 1861, Berlin. Ent. Zeitschr., V, p. 14 (♀). MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 447. EMERY, 1893, Boll. Mus. Zool. Anat. Comp. Torino, VIII, No. 163, p. 2.

*Lobopelta? attenuata* ROGER, 1863, 'Verzeich. Formicid.,' p. 19.

*Lobopelta attenuata* DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 43.

Type locality: Cape of Good Hope.

CAPE PROVINCE: Algoa Bay (H. Brauns). NATAL: Durban (C. B. Cooper).

PORTUGUESE EAST AFRICA: Delagoa Bay.

13<sub>1</sub>. Var. *jägerskiöldi* (SANTSCHI).

*Leptogenys (Lobopelta) jägerskiöldi* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 9 (♀).

*Leptogenys (Lobopelta) attenuata* var. *jägerskiöldi* SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), p. 279.

Type locality: Richmond, NATAL (I. Trägårdh).

14. *Leptogenys (Lobopelta) buyssoni* FOREL, 1907, Rev. d'Ent. Caen, XXVI, p. 131 (♀). EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 102 (♀).

Type locality: Hiéka Bourka, southern ABYSSINIA (de Rothschild).

15. *Leptogenys (Lobopelta) castanea* (MAYR) EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 102 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 101 (♀).

*Lobopelta castanea* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 734 (♀); 1863, ibid., XIII, p. 427. ROGER, 1863, 'Verzeich. Formicid.,' p. 19. MAYR, 1865, 'Reise Novara, Zool.,' II, Formicidæ, p. 72 (♀), Pl. III, fig. 20; 1878, Verh. Zool. Bot. Ges. Wien, XXVIII, p. 664 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 44.

*Leptogenys castanea* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 20 (♀).

Type locality: Cape of Good Hope (Novara Expedition).

CAPE PROVINCE: Algoa Bay (H. Brauns). TRANSVAAL: Makapan (E. Simon).

16. *Leptogenys (Lobopelta) ergatogyna* WM. M. WHEELER. See p. 95 (♀).

Type locality: Medje, BELGIAN CONGO (Lang and Chapin).

17. *Leptogenys (Lobopelta) guineensis* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 329, fig. 14 (♀).

Type locality: FRENCH GUINEA (F. Silvestri).

18. *Leptogenys (Lobopelta) havilandi* FOREL, 1901, Rev. Suisse Zool., IX, p. 332 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 102 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 96 (♀).

Type locality: NATAL (Haviland).

18a. Subsp. *peringueyi* FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 210 (♀).

*Leptogenys (Lobopelta) peringueyi* ARNOLD, 1915, Ann. South African Mus., XIV, p. 96 (♀).

Type locality: Table Mt., CAPE PROVINCE (L. Péringuey).

19. *Leptogenys (Lobopelta) intermedia* EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 102 (♀). FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 214 (♀).

*Leptogenys intermedia* EMERY, 1902, Rend. Accad. Sc. Bologna, N. S., VI, p. 32 (♀).

Type locality: Willowmore, CAPE PROVINCE (H. Brauns).

NATAL: Durban, Umgeni (G. Arnold).

20. *Leptogenys (Lobopelta) nitida* (F. SMITH) WASMANN, 1899, Deutsch. Ent. Zeitschr., p. 404. EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 102 (♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 110; 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 214 (♀). SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 11 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 101 (♀; part).

*Ponera nitida* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 92 (♀). ROGER, 1863, 'Verzeich. Formicid.,' p. 23. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 449.

*Lobopelta nitida* MAYR, 1886, Verh. Zool. Bot. Ges. Wien, XXXVI, p. 358 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 45.

*Leptogenys tenuis* STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08),' III, p. 376, fig. 1 (♀).

Type locality: Port Natal, NATAL.

NATAL: Estcourt (R. C. Wroughton); Stamford Hill (I. Trägårdh); Shivyre, 4000 ft. (Haviland). CAPE PROVINCE: Ladismith (H. Brauns). BELGIAN CONGO: Lake Kivu (Schubotz).

20i. Var. *adpressa* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 214 (♀).

Type locality: Grahamstown, CAPE PROVINCE (Hewitt).

20j. Var. *zena* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 215 (♀).

*Leptogenys (Lobopelta) nitida* ARNOLD, 1915, Ann. South African Mus., XIV, p. 101 (♀; part).

Type locality: Willowmore, CAPE PROVINCE (H. Brauns).

- 20s. Var. **gracilis** SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 11 (♀).  
Type locality: Lake Kivu, BELGIAN CONGO (Schubotz).
- 20a. Var. **grandior** FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 335 (♀).  
Type locality: Krantzklouf, NATAL (Marley).
- 20a. Subsp. **brevinodis** FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 335 (♀).  
Type locality: George, CAPE PROVINCE (H. Brauns).
- 20b. Subsp. **insinuata** SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 11 (♀).  
Type locality: Richmond, NATAL (I. Trägårdh).
21. **Leptogenys (Lobopelta) parva** FOREL, 1901, Rev. Suisse Zool., IX, p. 332 (♀, ♂). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 102 (♀, ♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 102 (♀).  
Type locality: NATAL (Haviland).
- 21s. Var. **bellua** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 214 (♀).  
Type locality: Durban, NATAL (G. Arnold).
- 21s. Var. **dispar** SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 10 (♀).  
Type locality: ZULULAND (I. Trägårdh).
22. **Leptogenys (Lobopelta) piroskæ** FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 247 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 102 (♀); 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 3 (♀).  
Type locality: Ghinda, ERITREA (K. Escherich; F. Silvestri).
23. **Leptogenys (Lobopelta) sulcinoda** (ERN. ANDRÉ) EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 102 (♀).  
*Lobopelta sulcinoda* ERN. ANDRÉ, 1892, Rev. d'Ent. Caen, XI, p. 48 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 46.  
Type locality: Gaboon, FRENCH CONGO.

### Odontomachini Mayr

#### Anochetus MAYR

- Anochetus* MAYR, 1861, 'Europ. Formicid.,' p. 53. EMERY, 1909, Deutsch. Ent. Zeitschr., p. 374; 1911, 'Gen. Insect., Ponerinae,' p. 107.
- Stenomyrme* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 711.
- Myrmecia* (part) FABRICIUS. *Odontomachus* (part) ILLIGER, F. SMITH, SPINOLA, ROGER.

Genotype: *Odontomachus ghilianii* Spinola, 1851.

1. **Anochetus africanus** (MAYR) FOREL, 1887, Mitth. Schweiz. Ent. Ges., VII, p. 382. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 47. FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 1. SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 351 (♀). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 131 (♀). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 108 (♀, ♀, ♂). FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 203 (♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 331 (♀). STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 372 (♀). See pp. 97 and 1012.

*Stenomyrmex africanus* MAYR, 1865, 'Reise Novara, Zool., II, Formicidæ,' p. 11, footnote (♀). ERN. ANDRÉ, 1892, Rev. d'Ent. Caen, XI, p. 47 (♀, ♀).

*Anochetus africanus* var. *camerunensis* MAYR, 1896, Ent. Tidskr., XVII, p. 236 (♀, ♂). EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 476 (♀, ♀, ♂).

Type locality: GOLD COAST.

GOLD COAST: Aburi (F. Silvestri). CAMEROON: (Sjöstedt); Mundame (Conradt); Victoria (F. Silvestri); Bibundi (Tessmann); Molundu (Schultze). FRENCH CONGO: Brazzaville (Weiss); Gaboon. BELGIAN CONGO: Medje (Lang and Chapin). GERMAN EAST AFRICA: Kibosho (Katona). SOMALILAND: (C. Keller).

1. Var. *obscuratus* (SANTSCHI) EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 108 (♀, ♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 56 (♀, ♀).

*Anochetus madagascariensis* var. *obscuratus* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXIX, p. 351 (♀, ♀).

Type locality: Kibosho, Mt. Kilimanjaro, GERMAN EAST AFRICA (C. Alluaud).

GERMAN EAST AFRICA: New Moschi (Alluaud and Jeannel). BRITISH EAST AFRICA: Mwatate, Wa-Taita Province (C. Alluaud).

2. *Anochetus bequaerti* FOREL, 1913, Rev. Zool. Afr., II, p. 309 (♀); 1913, Deutsch. Ent. Zeitschr., Beih., p. 203 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 103 (♀, ♀, ♂). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 400 (♀). See p. 99.

Type locality: Bukama, BELGIAN CONGO (J. Bequaert).

BELGIAN CONGO: (Kohl); Garamba (Lang and Chapin). RHODESIA: Bulawayo (G. Arnold).

2a. Subsp. *abstractus* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 12 (♀).

Type locality: Amanzimtoti, NATAL (I. Trägårdh).

3. *Anochetus concinnus* SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 9 (♀).

Type locality: Lugombe, BELGIAN CONGO (Gérard).

4. *Anochetus estus* WM. M. WHEELER. See p. 98 (♀).

Type locality: Akenge, BELGIAN CONGO (Lang and Chapin).

5. *Anochetus grandidieri* FOREL. See p. 1013.

5a. Var. *katona* FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 1 (♀). EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 109 (♀).

Type locality: Moschi, GERMAN EAST AFRICA (Katona).

6. *Anochetus levaillanti* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 21 (♀). FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 248 (♀). EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 108 (♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 108 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 107 (♀, ♀), Pl. III, figs. 25, 25a, 25b.

Type locality: Hamman's Kraal, TRANSVAAL (E. Simon).

SOUTHERN RHODESIA: Springvale (G. Arnold). ERITREA: Nefasit (K. Escherich).

7. *Anochetus opaciventris* WM. M. WHEELER. See p. 98 (♀).

Type locality: Akenge, BELGIAN CONGO (Lang and Chapin).

8. *Anochetus parvus* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 330 (♀).

Type locality: Olokemeji, NIGERIA (F. Silvestri).

81. Var. **longiceps** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 331 (♀).

Type locality: Victoria, CAMEROON (F. Silvestri).

9. **Anochetus pellucidus** EMERY, 1902, Rend. Accad. Sc. Bologna, N. S., VI, p. 33 (♂); 1911, 'Gen. Insect., Ponerinae,' p. 109 (♂).

Type locality: CAMEROON (Conradt).

9<sub>1</sub>. Var. **aurifrons** SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 351 (♂). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 109 (♂).

Type locality: FRENCH CONGO.

9<sub>2</sub>. Var. **maynei** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 347 (♀).

Type locality: Congo da Lemba, BELGIAN CONGO (R. Mayné).

10. **Anochetus punctaticeps** MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 4 (♂). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 109 (♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 105 (♂), Pl. III, fig. 26. See p. 99.

Type locality: Port Elizabeth, CAPE PROVINCE (H. Brauns).

BELGIAN CONGO: Babeyru (Lang and Chapin).

11. **Anochetus punctatus** SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 13 (♂).

Type locality: Lake Sibayi, ZULULAND (I. Trägårdh).

11<sub>1</sub>. Var. **occidentalis** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 330 (♂).

Type locality: Victoria, CAMEROON (F. Silvestri).

12. **Anochetus rothschildi** FOREL, 1907, Rev. d'Ent. Caen, XXVI, p. 129 (♂, ♂ ?). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 109 (♂).

Type locality: Daouélé, SOMALILAND (de Rothschild).

ABYSSINIA: Diré Daa; Upper Aouache, Endessa (de Rothschild).

13. **Anochetus talpa** FOREL, 1901, Rev. Suisse Zool., IX, p. 351 (♂). EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 110 (♂). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 331 (♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 106 (♂).

Type locality: NATAL (Haviland).

NIGERIA: Ibadan (F. Silvestri).

14. **Anochetus trægaordhi** MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicid.,' p. 2 (♂). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 351 (♂). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 400 (♂).

*Anochetus trægaordhi* EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 110 (♂).

*Anochetus trægaordhi* KARAWAIEW, 1911, Rev. Russe Ent., XI, p. 3 (♂).

Type locality: Khartum, ANGLO-EGYPTIAN SUDAN (I. Trägårdh; Karawaiew).

FRENCH CONGO: Brazzaville (A. Weiss). BELGIAN CONGO: (Kohl).

### Odontomachus LATREILLE

*Odontomachus* LATREILLE, 1805, 'Hist. Nat. Crust. Ins.,' XIII, p. 257. MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 710. EMERY, 1911, 'Gen. Insect., Ponerinae,' p. 111.

*Pedetes* BERNSTEIN, 1861, Verh. Zool. Bot. Ges. Wien, XI, Sitzb., p. 7.

*Formica* (part) LINNÆUS, LATREILLE, etc. *Myrmecia* (part) FABRICIUS. *Ponera* (part) LATREILLE, LEPELETIER.

*Atta* PATTON, 1894, *American Naturalist*, XXVIII, p. 618.

Genotype: *Formica hæmatoda* Linnæus, 1758.

1. *Odontomachus assiniensis* EMERY, 1892, *Ann. Soc. Ent. France*, LX, (1891), pp. 558, 560 (♂). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 49. EMERY, 1899, *Ann. Soc. Ent. Belgique*, XLIII, p. 476 (♂). SANTSCHI, 1910, *Ann. Soc. Ent. France*, LXXVIII, (1909), p. 350 (♀). STITZ, 1910, *Mitt. Zool. Mus. Berlin*, V, p. 130 (♂). FOREL, 1910, *Ann. Soc. Ent. Belgique*, LIV, p. 27. EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 113 (♂). FOREL, 1911, *Bull. Soc. Vaudoise Sc. Nat.*, (5) XLVII, p. 362 (♂, ♀); 1913, *Rev. Zool. Afr.*, II, p. 309 (♂); 1913, *Rev. Suisse Zool.*, XXI, p. 666 (♂, ♀, ♂). SANTSCHI, 1914, *Boll. Lab. Zool. Gen. Agrar. Portici*, VIII, p. 332 (♂); 1914, *Deutsch. Ent. Zeitschr.*, p. 288 (♂); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 57 (♂, ♂). STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 372 (♂). See p. 100.

*Odontomachus intermedius* STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exped. (1907-08),' III, p. 378 (♂).

*Odontomachus assiniensis* subsp. *intermedius* SANTSCHI, 1914, *Med. Göteborgs Mus. Zool. Afd.*, III, p. 14.

Type locality: Assinie, IVORY COAST (C. Alluaud).

GOLD COAST: Aburi (F. Silvestri). TOGO: Bismarckburg (Conradt; Büttner); Misahöhe (Baumann). CAMEROON: (Bartsch); Molundu (Schultze); Mundame (Conradt); Soppo (von Rothkirch). FERNANDO PO: (Conradt). FRENCH CONGO: between Fort de Possel and Fort Crampel (Schubotz); Brazzaville (A. Weiss). BELGIAN CONGO: Beni (Borgerhoff); Kimpoko (Büttner); Bakaie, between Nyangwe and Stanleyville (Fauconnet); Akenge; Medje; Ngayu; Niangara; Niapu (Lang and Chapin). GERMAN EAST AFRICA: Buiko (H. Prell); Amani (Zimmer); Buddu Forest (Schubotz). UGANDA: Toro; Unyoró, Mubende Region; Ibanda, Mt. Ruwenzori, 1400 m. (C. Alluaud).

1. Var. *aterrimus* WM. M. WHEELER. See p. 102 (♂).

Type locality: Niapu, BELGIAN CONGO (Lang and Chapin).

2. Var. *furvior* WM. M. WHEELER. See p. 101 (♂, ♀).

Type locality: Faradje, BELGIAN CONGO (Lang and Chapin).

BELGIAN CONGO: Yakuluku; Stanleyville; Bafwasende; Medje; Ngayu; Akenge; Boyulu; Niangara (Lang and Chapin); Thysville (J. Bequaert).

3. Var. *fuscus* STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 372 (♂, ♀).

Type locality: Duma, BELGIAN CONGO (Schubotz).

1a. Subsp. *caffrorum* SANTSCHI, 1914, *Med. Göteborgs Mus. Zool. Afd.*, III, p. 14 (♂).

Type locality: Dukudu, ZULULAND (I. Trägårdh).

1b. Subsp. *fauconneti* FOREL, 1910, *Ann. Soc. Ent. Belgique*, LIV, p. 27 (♂). EMERY, 1911, 'Gen. Insect., Ponerinæ,' p. 113 (♂).

Type locality: Bakaie, between Nyangwe and Stanleyville, BELGIAN CONGO (Fauconnet).

2. *Odontomachus hæmatoda* (LINNÆUS) DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 50. ERN. ANDRÉ, 1895, *Rev. d'Ent. Caen*, XIV, p. 2 (♂). MAYR, 1896, *Ent. Tidskr.*, XVII, p. 238 (♂). EMERY, 1899, *Ann. Mus. Civ. Genova*, XXXIX, p. 500; 1899, *Mem. Accad. Sc. Bologna*, (5) VIII, p. 3 (larva), Pl. I, fig. 4; 1911, 'Gen. Insect.,



*Ponerinae*, p. 114, Pl. III, fig. 18. ARNOLD, 1915, Ann. South African Mus., XIV, p. 108 (♀, ♀, ♂). STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 373 (♀, ♀). See pp. 102 and 1013.

*Formica hæmatoda* LINNÆUS, 1758, 'Syst. Nat.,' Ed. 10, I, p. 582 (♀). P. F. GMELIN, 1766, 'Onomatol. Hist. Nat.,' III, p. 925. LINNÆUS, 1767, 'Syst. Nat.,' Ed. 12, I, 2, p. 965 (♀). FABRICIUS, 1775, 'Syst. Ent.,' p. 395 (♀). PH. L. MÜLLER, in Linnæus, 1775, 'Vollst. Natursyst.,' V, 2, p. 916 (♀), Pl. XXVII, fig. 17. FABRICIUS, 1781, 'Spec. Insect.,' I, p. 494 (♀); 1787, 'Mantissa Insect.,' I, p. 311 (♀). GMELIN, in Linnæus, 1790, 'Syst. Nat.,' Ed. 13, I, 5, p. 2803 (♀). CHRIST, 1791, 'Naturg. d. Insect.,' p. 516 (♀). OLIVIER, 1791, 'Encycl. Méthod. Insect.,' VI, p. 502 (♀). FABRICIUS, 1793, 'Ent. Syst.,' II, p. 364 (♀). LATREILLE, 1802, 'Hist. Nat. Fourmis,' p. 192 (♀).

*Formica maxillosa* DEGEER, 1773, 'Mém. Hist. Ins.,' III, p. 601 (♀), Pl. XXXI, figs. 3-5. GÖZE, in DeGeer, 1780, 'Abh. Gesch. Insekt.,' III, p. 390 (♀), Pl. XXXI, figs. 3-5. RETZIUS, 1783, 'Gen. et Spec. Insect.,' p. 75 (♀).

*Formica unispinosa* FABRICIUS, 1793, 'Ent. Syst.,' II, p. 359 (♀). LATREILLE, 1802, 'Hist. Nat. Fourmis,' p. 193 (♀), Pl. VIII, fig. 53.

*Myrmecia hæmatoda* FABRICIUS, 1804, 'Syst. Piez.,' p. 425 (♀).

*Myrmecia unispinosa* FABRICIUS, 1804, *ibid.*, p. 423 (♀). OLIVIER, 1811, 'Encycl. Méthod. Insect.,' VIII, p. 114 (♀).

*Odontomachus hæmatodes* LATREILLE, 1805, 'Hist. Nat. Crust. Ins.,' XIII, p. 257 (♀). ILLIGER, 1807, Mag. f. Insectenk., VI, p. 194. LEPELETIER, 1836, 'Hist. Nat. Ins. Hym.,' I, p. 187 (♀). F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 76 (♀, ♀, ♂), Pl. v, figs. 4-7. GERSTÄCKER, 1858, Monatsb. Ak. Wiss. Berlin, p. 262; 1859, Arch. f. Naturg., XXV, 2, p. 431. ROGER, 1861, Berlin. Ent. Zeitschr., V, p. 24 (♀, ♀, ♂). GERSTÄCKER, in Peters, 1862, 'Reise n. Mossambique, Zool.,' V, p. 503 (♀, ♂). MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 711; 1863, *ibid.*, XIII, p. 436. ROGER, 1863, 'Verzeich. Formicid.,' p. 22. MAYR, 1867, Tijdschr. v. Ent., V, p. 79 (♀, ♀); 1867, Journ. Mus. Godeffroy, XII, p. 85. W. F. KIRBY, 1884, Ann. Mag. Nat. Hist., (5) XIII, p. 405. MAGRETTI, 1884, Ann. Mus. Civ. Genova, XXI, p. 538 (♀); 1884, Bull. Soc. Ent. Italiana, XV, (1883), p. 244 (♀). WASMANN, 1892, Wien. Ent. Zeitg., XI, p. 317. EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), pp. 557 and 561 (♀, ♀). FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 74. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 126. EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 22. BINGHAM, 1903, 'Fauna Brit. India, Hym.,' II, p. 47 (♀, ♀). MAYR, 1907, Sitzb. Ak. Wiss. Wien, math. naturw. Kl., CXVI, Abt. I, p. 387. ZAVATTARI, 1909, 'Il Ruwenzori, Parte Scientif.,' I, p. 213 (♀, ♂). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 350 (♀, ♀). FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 51 (♀, ♂). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 130 (♀, ♀). FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 4 (♀, ♂); 1912, Mitt. Naturh. Mus. Hamburg, XXIX, p. 179 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, pp. 108 and 347 (♀, ♀); 1913, Rev. Zool. Afr., II, p. 309 (♀). LAMBORN, 1914, Trans. Ent. Soc. London, (1913), p. 442 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 58 (♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 331 (♀, ♀); 1920, 'Études Maladies Parasites Cacaoyer S. Thomé,' X, p. 2 (♀).

*Odontomachus unispinosus* ILLIGER, 1807, Mag. f. Insectenk., VI, p. 194. LEPELETIER, 1836, 'Hist. Nat. Ins. Hym.,' I, p. 187 (♀, ♀). F. SMITH, 1853, Trans. Ent. Soc. London, (2) II, Proc., p. 134.

*Ponera (Odontomachus) hæmatoda* LATREILLE, 1809, 'Gen. Crust. Ins.,' IV, p. 128.

*Ponera (Odontomachus) unispinosa* LATREILLE, 1809, *ibid.*, IV, p. 128.

*Ponera hæmatoda* LEPELETIER, 1825, 'Encycl. Méthod. Insect.,' X, p. 184 (♀).

*Ponera unispinosa* LEPELETIER, 1825, *ibid.*, X, p. 184 (♀).

*Formica (Odontomachus) hæmatodes* BLANCHARD, in Cuvier, 1849, 'Règne Animal,' Ed. 3, Insect., Pl. cxvii, fig. 6 (♀).

*Odontomachus similimus* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 80 (♀), Pl. v, figs. 8-9; 1860, Journ. Proc. Linn. Soc. London, Zool., IV, Suppl., p. 72.

*Odontomachus hæmatodes* var. *microcephalus* EMERY, 1890, Bull. Soc. Ent. Italiana, XXII, p. 104, Pl. v, fig. 1 (mermithergate).

Type locality: "in America meridionali."

Tropicopolitan. SENEGAMBIA: Thiès (F. Silvestri). FRENCH GUINEA: Kindia (F. Silvestri). LIBERIA: Junk River (H. Brauns). IVORY COAST: Assinie (C. Alluaud). GOLD COAST: Kitta (H. Brauns); Aburi (F. Silvestri). NIGERIA: Ibadan; Lagos; Olokemeji (F. Silvestri); Oni Camp, 70 miles east of Lagos (Lamborn). CAMEROON: (H. Brauns); Barombi (Freyer); Bibundi (Tessmann); Yaunde (Zenker); Moliwe region (Conradt); Victoria (F. Silvestri). FERNANDO PO: (Conradt). SPANISH GUINEA: Alen (Tessmann). SAN THOMÉ: (de Seabra). FRENCH CONGO: Ogowé (Mocquerys); Brazzaville (A. Weiss). BELGIAN CONGO: Kimpoko (Büttner); Boma (Leboutte); Leopoldville (Lamarche); Congo da Lemba (R. Mayné); Libenge (Schubotz); Mayombe (de Briey); Duma (Montchal); Stanleyville; Malela; Faradje; Zambi; Avakubi; Leopoldville; Vankerckhovenville; Garamba; Akenge (Lang and Chapin); Matadi; Katala (J. Bequaert). SOUTHERN RHODESIA: Bulawayo (G. Arnold). BECHUANALAND: Severelela; Khakhea to Kang (L. Schultze). TRANSVAAL: Hamman's Kraal (E. Simon); Lydenburg. DELAGOA: (Liengme). MOZAMBIQUE: (Peters). UGANDA: Ibanda; Kitaguet; Butiti; Nakitawa (Duke of Abruzzi); Entebbe (H. Schultze). BRITISH EAST AFRICA: Shimoni; Kisumu; Mombasa (Alluaud and Jeannel). ABYSSINIA: (Ilg); Dimé to Bass Narok (V. Bottego). ANGLO-EGYPTIAN SUDAN: Khor Attar (F. Werner); Bahr-el-Salaam (Magretti). ERITREA: Sogodas; Kor Lebka (Magretti).

21. Var. *stanleyi* W. M. WHEELER. See p. 102 (♀).

Type locality: Stanleyville, BELGIAN CONGO (Lang and Chapin).

22. Var. *troglodytes* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 58 (♀).

Type locality: Shimoni, BRITISH EAST AFRICA (Alluaud and Jeannel).

## PSEUDOMYRMINÆ Emery

### Pseudomyrmini Emery

#### Tetraponera F. SMITH

*Tetraponera* F. SMITH, 1852, Ann. Mag. Nat. Hist., (2) IX, p. 44; 1877, Trans. Ent. Soc. London, p. 68. DONISTHORPE, 1916, Ent. Record, XXVIII, p. 244.

*Sima* ROGER, 1863, Berlin. Ent. Zeitschr., VII, p. 178. EMERY, 1915, Zool. Anzeiger, XLV, pp. 265-266; 1917, Bull. Soc. Ent. France, p. 94.

*Tetraponera* EMERY (as a subgenus). *Pseudoponera* (part) SMITH. *Eciton* JERDON (*nec* Latreille).

Genotype: *Eciton nigrum* Jerdon, 1851 = *Tetraponera atrata* Smith, 1852.

1. **Tetraponera ambigua** (EMERY).

*Sima ambigua* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 23 (♀, ♀). FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 89 (without description); 1901, *ibid.*, X, p. 311; in Baum, 1903, 'Kunene-Sambesi Expedition,' p. 564; in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 5 (♀, ♀, ♂).

*Sima (Tetraponera) ambigua* ARNOLD, 1916, Ann. South African Mus., XIV, p. 185 (♀, ♀, ♂).

Type locality: Hamman's Kraal, TRANSVAAL (E. Simon).

TRANSVAAL: Makapan (E. Simon). BECHUANALAND: Kang to Kgokong (L. Schultze). MOSSAMEDES: between the Cubango and Cuito Rivers (Baum and Van der Kellen). SOUTHERN ABYSSINIA: (Ilg).

1a. Subsp. **erythræa** (EMERY).

*Sima ambigua* subsp. *erythræa* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 23 (♀).

Type locality: Aden, ARABIA (E. Simon).

1b. Subsp. **rhodesiana** (FOREL).

*Sima ambigua* subsp. *rhodesiana* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 112 (♀). ARNOLD, 1914, Proc. Rhodesia Sc. Ass., XIII, p. 31, Pl., fig. 1 (♀).

*Sima (Tetraponera) ambigua* subsp. *rhodesiana* ARNOLD, 1916, Ann. South African Mus., XIV, p. 186 (♀, ♀).

Type locality: Plumtree, SOUTHERN RHODESIA (G. Arnold).

SOUTHERN RHODESIA: Bembesi (G. Arnold).

2. **Tetraponera andrei** (MAYR).

*Sima andrei* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 144 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 179 (♀).

Type locality: Delagoa Bay, PORTUGUESE EAST AFRICA (H. Brauns).

3. **Tetraponera anthracina** (SANTSCHI). See p. 106.

*Sima anthracina* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 355 (♀); 1910, *ibid.*, LXXIX, p. 352, fig. 3 (♀). FOREL, 1911, Rev. Zool. Afr., I, p. 275 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 350 (♀); 1916, Rev. Suisse Zool., XXIV, p. 403 (♀).

Type locality: Combra Tora, FRENCH CONGO (A. Weiss).

BELGIAN CONGO: St. Gabriel (Kohl); Kisantu; Congo da Lemba (R. Mayné); Thysville; Lubutu (Bequaert); Stanleyville (Lang and Chapin).

4. **Tetraponera bifoveolata** (MAYR).

*Sima bifoveolata* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 146 (♀); in Jägerskiöld, 1903, 'Exped., IX, Formicid.,' p. 4 (♀).

*Sima (Tetraponera) bifoveolata* ARNOLD, 1916, Ann. South African Mus., XIV, p. 184 (♀).

Type locality: Delagoa Bay, PORTUGUESE EAST AFRICA (H. Brauns).

ANGLO-EGYPTIAN SUDAN: Kaka, White Nile (I. Trägårdh). ZANZIBAR: (H. Brauns).

A subspecies is known from Palestine.

4a. Subsp. **maculifrons** (SANTSCHI).

*Sima foveolata* subsp. *maculifrons* SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, p. 162 (♀).

Type locality: Obock, FRENCH SOMALILAND (Maindron).

5. **Tetraponera capensis** (F. SMITH) ROGER, 1863, 'Verzeich. Formicid.,' p. 24.

*Pseudomyrma capensis* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 160 (♀).  
MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 451. F. SMITH, 1877, Trans. Ent. Soc. London, p. 60.

*Sima capensis* DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 53.

Type locality: Cape of Good Hope.

6. **Tetraponera claveau** (SANTSCHI).

*Sima claveau* SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 304 (♀).

Type locality: Senegal (Claveau).

7. **Tetraponera clypeata** (EMERY).

*Sima clypeata* EMERY, 1886, Bull. Soc. Ent. Italiana, XVIII, p. 361 (♀), Pl. xvii, figs. 4 and 5. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 53. EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 24 (♀); 1899, Mem. Accad. Sc. Bologna, (5) VIII, p. 4 (larva).

*Sima (Tetraponera) clypeata* ARNOLD, 1916, Ann. South African Mus., XIV, p. 182 (♀, ♀), Pl. v, figs. 50, 50a.

Type locality: Cape of Good Hope (L. Péringuey).

CAPE PROVINCE: Cape Town; Matjesfontein (E. Simon).

7a. Subsp. **braunsi** (FOREL).

*Sima braunsi* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 112 (♀, ♀).

*Sima (Tetraponera) clypeata* subsp. *braunsi* ARNOLD, 1916, Ann. South African Mus., XIV, p. 184 (♀, ♀), Pl. v, fig. 49.

Type locality: Willowmore, CAPE PROVINCE (H. Brauns).

7a<sub>1</sub>. Var. **durbanensis** (FOREL).

*Sima braunsi* var. *durbanensis* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 218 (♀).

*Sima (Tetraponera) clypeata* subsp. *braunsi* var. *durbanensis* ARNOLD, 1916, Ann. South African Mus., XIV, p. 184 (♀).

Type locality: Durban, NATAL (G. Arnold).

7a<sub>2</sub>. Var. **equidentata** (ARNOLD).

*Sima (Tetraponera) clypeata* subsp. *braunsi* var. *equidentata* ARNOLD, 1916, Ann. South African Mus., XIV, p. 184 (♀), Pl. v, fig. 48.

Type locality: Cape Town, CAPE COLONY (G. Arnold).

8. **Tetraponera emeryi** (FOREL).

*Sima capensis* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 23 (♀) (*nec* F. Smith).

*Sima emeryi* FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 367 (♀).

*Sima (Tetraponera) emeryi* ARNOLD, 1916, Ann. South African Mus., XIV, p. 187 (♀).

Type locality: Pretoria, TRANSVAAL (E. Simon).

9. **Tetraponera encephala** (SANTSCHI).

*Sima encephala* SANTSCHI, 1919, Rev. Zool. Afr., VII, p. 84 (♀).

Type locality: Saint Louis, SENEGAMBIA (Claveau).

10. **Tetraponera gerdæ** (STITZ).

*Sima gerdæ* STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08),' III, p. 381, fig. 4 (♀).

Type locality: Amani, GERMAN EAST AFRICA (Vosseler).

11. **Tetraponera le moulti** (SANTSCHI).

*Sima le moulti* SANTSCHI, 1920, Ann. Soc. Ent. France, LXXXVIII, (1919), p. 375 (♀).

Type locality: Fort Crampel, FRENCH CONGO (Le Moul't).

12. **Tetraponera liengmei** (FOREL).

*Sima liengmei* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 88 (♀, ♂).

*Sima* (*Tetraponera*) *liengmei* ARNOLD, 1916, Ann. South African Mus., XIV, p. 181 (♀, ♂).

Type locality: Delagoa Bay, PORTUGUESE EAST AFRICA (Liengme).

13. **Tetraponera mayri** (FOREL).

*Sima mayri* FOREL, 1901, Mitt. Naturh. Mus. Hamburg, XVIII, p. 53 (♀).

Type locality: CAMEROON (H. Brauns).

14. **Tetraponera mocquerysi** (ERN. ANDRÉ).

*Sima mocquerysi* ERN. ANDRÉ, 1890, Rev. d'Ent. Caen, IX, p. 319 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 54. EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 23 (♀); 1895, Ann. Mus. Civ. Genova, XXXV, p. 178. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 146. STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 131 (♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXIX, p. 352, fig. 2 (♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 334 (♀). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 403 (♀). SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 10.

Type locality: SIERRA LEONE (Mocquerys).

GOLD COAST: Chama (H. Brauns). TOGO: Bismarckburg (Conradt). FRENCH GUINEA: Kakoulima (F. Silvestri). SPANISH GUINEA: Alen (Tessmann). FRENCH CONGO: Benda (Charleux). BELGIAN CONGO: (Kohl). ABYSSINIA: Arussi Galla, Ganale Gudda (V. Bottego).

14<sub>1</sub>. Var. **elongata** (Stitz).

*Sima mocquerysi* var. *elongata* STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exped. (1907-08),' III, p. 378, fig. 2 (♀).

Type locality: Buddu Forest, GERMAN EAST AFRICA (N. W. of Bukoba) (Schubotz).

14<sub>2</sub>. Var. **lepida** Wm. M. WHEELER. See p. 106 (♀, ♀).

Type locality: Faradje, BELGIAN CONGO (Lang and Chapin).

BELGIAN CONGO: Yakuluku; Garamba (Lang and Chapin).

14<sub>3</sub>. Var. **lutea** (Stitz).

*Sima mocquerysi* var. *lutea* STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exped. (1907-08),' III, p. 381, fig. 3 (♀, ♀).

Type locality: Kwidjwi Island, Lake Kivu, BELGIAN CONGO (Schubotz).

14a. Subsp. **emacerata** (SANTSCHI). See p. 107.

*Sima mocquerysi* subsp. *emacerata* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXIX, p. 352, fig. 1 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 70 (♀, ♀).

*Sima emacerata* SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 9 (♀).

Type locality: Nakuru, Rift Valley, BRITISH EAST AFRICA (C. Alluaud).

CENTRAL UGANDA: (C. Alluaud). BELGIAN CONGO: Stanleyville; Faradje (Lang and Chapin); Lubutu; Kasonsero on the Semliki River (J. Bequaert); Ngazi (Elskens).

15. **Tetraponera natalensis** (F. SMITH) ROGER, 1863, 'Verzeich. Formicid.,' p. 24. F. SMITH, 1877, Trans. Ent. Soc. London, p. 69.

*Pseudomyrma natalensis* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 160 (♀). MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 452. F. SMITH, 1876, Trans. Ent. Soc. London, p. 604.

*Sima capensis* MAYR, 1866, Verh. Zool. Bot. Ges. Wien, XVI, p. 906 (♀), Pl. XX, fig. 14. EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 113 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 53. H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 43 (*nec Sima capensis* Smith).

*Pseudomyrma capensis* GERSTÄCKER, 1871, Arch. f. Naturg., XXXVII, 1, p. 355; 1873, in 'v. d. Decken's Reisen in Ostafrika, Gliederthiere,' p. 357 (♀, ♀).

*Sima natalensis* EMERY, 1892, Zool. Anzeiger, XV, p. 237; 1895, Ann. Soc. Ent. France, LXIV, p. 22 (♀, ♀); 1899, Mem. Accad. Sc. Bologna, (5) VIII, p. 4 (larva), Pl. II, fig. 7. FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 26 (♀); 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 367 (♀). SANTSCI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 15 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 176 (♀, ♀).

Type locality: Port Natal, NATAL.

South Africa generally (G. Arnold). CAPE PROVINCE: (H. Brauns). NATAL: Durban (Marley); Weenen District (J. M. Hutchinson); Stamford Hill (I. Trägårdh). ZULULAND: Umfolosi (I. Trägårdh). TRANSVAAL: Makapan; Hamman's Kraal (E. Simon). GERMAN EAST AFRICA: Mto-ya-Kifaru (Katona); Ndara; Ugono Mts. (v. d. Decken). SOMALILAND: Obbia (Bricchetti-Robecchi).

15<sub>1</sub>. Var. *obscurata* (EMERY).

*Sima natalensis* var. *obscurata* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 22 (♀). FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 5 (♀); 1911, Sitzb. Bayer. Akad. Wiss., p. 274; 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 368 (♀); 1915, *ibid.*, (5) L, p. 336 (♀).

*Sima natalensis* subsp. *obscurata* ARNOLD, 1916, Ann. South African Mus., XIV, p. 177 (♀, ♀, ♂).

Type locality: Cape of Good Hope.

CAPE PROVINCE: Algoa Bay (H. Brauns). NATAL: Durban (C. B. Cooper). NORTHERN RHODESIA: shore of the Zambesi River (Fr. Steiner).

15<sub>2</sub>. Var. *usambarensis* (FOREL).

*Sima natalensis* var. *usambarensis* FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 367 (♀). SANTSCI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 70 (♀, ♀).

Type locality: Monga, GERMAN EAST AFRICA (H. Prell).

GERMAN EAST AFRICA: Kilema, Mt. Kilimanjaro, 1440 m.; Kibosho (Alluaud and Jeannel). BRITISH EAST AFRICA: Moschi (Zimmer); Mombasa; Shimoni; Nairobi, Kikuyu; Voi, Taita; Maji-ya-chumvi, Wa-Nyika (Alluaud and Jeannel).

15<sub>3</sub>. Subsp. *caffra* (SANTSCI).

*Sima natalensis* subsp. *caffra* SANTSCI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 15 (♀, ♀, ♂). TRÄGÅRDH, *ibid.*, p. 43.

*Sima natalensis* subsp. *obscurata* var. *caffra* ARNOLD, 1916, Ann. South African Mus., XIV, p. 178 (♀, ♀, ♂).

Type locality: Dukudu, ZULULAND (I. Trägårdh).

ZULULAND: Lake Sibayi (I. Trägårdh).

15<sub>4</sub>. Subsp. *cuitensis* (FOREL).

*Sima natalensis* subsp. *cuitensis* FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 368 (♀).

*Sima natalensis* FOREL, 1901, Mitth. Schweiz. Ent. Ges., X, p. 311; in Baum, 1903, 'Kunene-Sambesi Expedition,' p. 564.

Type locality: Between the Cubango River and Cuito River, MOSSAMEDES (Baum and Van der Kellen).

15b1. Var. *bulawayana* (FOREL).

*Sima natalensis* subsp. *cuitensis* var. *bulawayana* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 112 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 179 (♀, ♀).

Type locality: Bulawayo, SOUTHERN RHODESIA (G. Arnold).

SOUTHERN RHODESIA: Plumtree; Bembesi; Victoria Falls (G. Arnold).

16. *Tetraponera oberbecki* (FOREL).

*Sima oberbecki* FOREL, 1911, Rev. Zool. Afr., I, p. 275 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 350 (♀); 1916, Rev. Suisse Zool., XXIV, p. 403 (♀). SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 9.

Type locality: Congo da Lemba, BELGIAN CONGO (R. Mayné).

BELGIAN CONGO: Leopoldville (Kohl); Elisabethville (Lepiae). FRENCH CONGO: Samkita (F. Faure).

17. *Tetraponera ophthalmica* (EMERY). See p. 107.

*Sima ophthalmica* EMERY, 1912, Ann. Soc. Ent. Belgique, LVI, p. 98 (♀). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 403 (♀).

Type locality: CAMEROON (Conradt).

BELGIAN CONGO: Bengamisa; St. Gabriel; Stanleyville (H. Kohl); Thysville (J. Bequaert). CAMEROON: Batanga (G. Schwab).

18. *Tetraponera penzigi* (MAYR).

*Sima penzigi* MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 10 (♀, ♀, ♂). FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 5 (♀).

*Sima penzigi* SJÖSTEDT, 1908, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, pp. 116-117.

*Sima* (*Tetraponera*) *penzigi* ARNOLD, 1916, Ann. South African Mus., XIV, p. 180 (♀, ♀, ♂).

Type locality: Mt. Kilimanjaro, Kahe, GERMAN EAST AFRICA (Sjöstedt).

GERMAN EAST AFRICA: Tanda, Usambara (Sjöstedt). BECHUANALAND: Lehututu (L. Schultze). ABYSSINIA: (Penzig).

18a. Subsp. *continua* (FOREL).

*Sima penzigi* subsp. *continua* FOREL, 1907, Rev. d'Ent. Caen, XXVI, p. 138 (♀).

Type locality: Gotta, southern ABYSSINIA (de Rothschild).

19. *Tetraponera prelli* (FOREL).

*Sima prelli* FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 365 (♀).

Type locality: Monga, GERMAN EAST AFRICA (H. Prell).

19i. Var. *odiosa* (FOREL).

*Sima prelli* var. *odiosa* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 403 (♀).

Type locality: BELGIAN CONGO (Kohl).

20. *Tetraponera schulthessi* (SANTSCHI).

*Sima schulthessi* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 249 (♀).

Type locality: Rikatla, Delagoa Bay, PORTUGUESE EAST AFRICA (Junod).

21. *Tetraponera triangularis* (STITZ).

*Sima triangularis* STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 131 (♀).

Type locality: Alen, SPANISH GUINEA (Tessmann).

21a. Subsp. *illota* (SANTSCHI).

*Sima triangularis* subsp. *illota* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 334 (♀, ♀).

Type locality: Olokemeji, SOUTHERN NIGERIA (F. Silvestri).

### **Viticicola** WM. M. WHEELER

*Viticicola* WM. M. WHEELER, 1920, Psyche, XXVII, p. 53.

Genotype: *Sima tessmanni* Stitz, 1910.

1. **Viticicola tessmanni** (STITZ). See p. 109 (♀, ♀, ♂).

*Sima tessmanni* STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 131, fig. 2 (♀).

SANTSCHI, 1919, Rev. Zool. Afr., VII, p. 84 (♀).

Type locality: Alen, SPANISH GUINEA (Tessmann).

BELGIAN CONGO: Medje (Lang and Chapin).

1<sub>1</sub>. Var. **castanea** WM. M. WHEELER. See p. 112 (♀, ♀).

Type locality: Avakubi, BELGIAN CONGO (Lang and Chapin).

### **Pachysima** EMERY

*Sima* subg. *Pachysima* EMERY, 1912, Ann. Soc. Ent. Belgique, LVI, p. 97.

Genotype: *Tetraponera aethiops* F. Smith, 1877.

1. **Pachysima aethiops** (F. SMITH). See p. 114.

*Tetraponera aethiops* F. SMITH, 1877, Trans. Ent. Soc. London, p. 71 (♀).

*Sima aethiops* EMERY, in Dalla Torre, 1893, 'Cat. Hym.,' VII, p. 53. H. KOHL, 1909, Natur u. Offenbarung, LV, p. 167. SANTSCHI, 1911, Rev. Zool. Afr., I, p. 207 (♂). FOREL, 1913, *ibid.*, II, p. 352 (♀). LAMBORN, 1914, Trans. Ent. Soc. London, (1913), pp. 442 and 493 (♀). H. SCHMITZ, 1915, Deutsch. Ent. Zeitschr., p. 500.

*Sima spininoda* ERN. ANDRÉ, 1892, Rev. d'Ent. Caen, XI, p. 51 (♀, ♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 55. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 144. H. KOHL, 1909, Natur u. Offenbarung, LV, pp. 99, 103, 104, 106, 108, and 167. STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 131 (♀, ♀); 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exped. (1907-08),' III, p. 381 (♀, ♀).

*Sima (Pachysima) aethiops* EMERY, 1912, Ann. Soc. Ent. Belgique, LVI, p. 97, figs. 2 and 3 (♀, ♀, larva). FOREL, 1913, Rev. Suisse Zool., XXI, p. 668 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 350 (♀); 1916, Rev. Suisse Zool., XXIV, p. 403 (♀, ♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 174 (♀, ♀, ♂).

*Sima (Pachysima) spininoda* STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 374 (♀, ♀, ♂).

Type locality: South Africa.

SOUTHERN NIGERIA: Oni Camp, east of Lagos (Lamborn). FERNANDO PO: (Conradt). CAMEROON: Bipindi (Zenker); Mundame (Conradt); Bibundi (Tessmann); Metit (G. Schwab). SPANISH GUINEA: Eloby Island (H. Brauns); Alen (Tessmann). FRENCH CONGO: Samkita (F. Faure). BELGIAN CONGO: Kibombo (J. Bequaert); Watikaia; Tshopo River; Candolo; Okiavo-Lindi River; St. Gabriel (Kohl); Mawambi to Avakubi; Duma; Libenge (Schubotz); Avakubi; Stanleyville; Ambelokudi; Isangi; Panga; Medje; Bafwabaka (Lang and Chapin).

2. **Pachysima latifrons** (EMERY). See p. 120.

*Sima (Pachysima) latifrons* EMERY, 1912, Ann. Soc. Ent. Belgique, LVI, p. 98, fig. 4 (♀). FOREL, 1913, *ibid.*, LVII, p. 350 (♀). SANTSCHI, 1914, Deutsch. Ent. Zeitschr., p. 288 (♀, ♀, ♂).



*Sima æthiops* FOREL, 1913, Rev. Zool. Afric., II, p. 315 (♀).

Type locality: Gaboon, FRENCH CONGO.

BELGIAN CONGO: Kondué (Luja); Niangara (Lang and Chapin). CAMEROON: Tiko near Victoria (F. Silvestri). FRENCH CONGO: Lobay (Ringenbach).

### MYRMICINÆ Lepeletier

#### Myrmicini Emery

#### Cratomyrmex EMERY

*Cratomyrmex* EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), p. 572.

Genotype: *Cratomyrmex regalis* Emery, 1892.

1. *Cratomyrmex regalis* EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), p. 572 (♀), Pl. xv, fig. 16. SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 307, fig. 3 (♀, ♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 335 (♀).

*Messor* (*Cratomyrmex*) *regalis* SANTSCHI, 1920, Ann. Soc. Ent. France, LXXXVIII, (1919), p. 377 (♀).

Type locality: Benue, NIGERIA.

LOWER DAHOMY: Aguagua (Roubaud). NIGERIA: Lagos; Olokemeji (F. Silvestri). CONGO: (Cabra).

1. Var. *rubeus* SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 308 (♀).

Type locality: LOWER DAHOMY (Le Moutt).

2. Var. *sculpturatus* (STITZ).

*Cratomyrmex sculpturatus* STITZ, 1916, 'Wiss. Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 378, fig. 2 (♀).

Type locality: Fort de Possel to Fort Crampel, FRENCH CONGO (Schubotz).

FRENCH CONGO: Falls of the Nana River near Fort Crampel (Haberer).

#### Pheidolini Emery

#### Messor FOREL

*Aphænogaster* subg. *Messor* FOREL, 1890, Ann. Soc. Ent. Belgique, XXXIV, C.R., p. lxviii.

*Messor* EMERY, 1908, Deutsch. Ent. Zeitschr., p. 437.

*Formica* (part) FABRICIUS, GMELIN, LATREILLE, etc. *Myrmica* (part) FÖRSTER.

*Atta* (part) SMITH, ROGER. *Aphænogaster* (part) ERN. ANDRÉ, DALLA TORRE, EMERY, MAYR, etc. *Stenammina* (part) EMERY, FOREL, MAYR, etc.

Genotype: *Formica barbara* Linnaeus.

1. *Messor barbarus* (LINNÆUS) EMERY, 1908, Deutsch. Ent. Zeitschr., p. 442 (2, ♀, ♀, ♂).

*Formica barbara* LINNÆUS, 1767, 'Syst. Nat.,' Ed. 12, I, 2, p. 962 (♀).

*Aphænogaster barbara* MAGRETTI, 1877, Ann. Mus. Civ. Genova, IX, p. 373 (♀, ♀, ♂); 1884, ibid., XXI, p. 541 (♀); 1884, Bull. Soc. Ent. Italiana, XV, (1883), p. 245 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 99.

*Aphænogaster* (*Messor*) *barbara* FOREL, 1892, Mitth. Schweiz. Ent. Ges., VIII, p. 352 (♀).

*Stenammina* (*Messor*) *barbarum* FOREL, 1904, Ann. Mus. Zool. Ac. Sc. St. Pétersbourg, VIII, (1903), p. 373 (♀).

Type locality: Barbary.

The following localities probably all refer to some of the subspecies or varieties mentioned below.

ANGLO-EGYPTIAN SUDAN: El Hefera, Settit; Metemma; Sebderat (Magretti); Godo Burka (Kachovskij). SOMALILAND: (C. Keller). ERITREA: Keren; Kor Lebka (Magretti).

1<sub>1</sub>. Var. **punctatus** (FOREL).

*Aphenogaster barbara* var. *punctata* FOREL, 1886, Journ. Asiat. Soc. Bengal, LV, pt. 2, p. 248 (♀).

*Aphenogaster* (Messor) *barbara* var. *punctata* EMERY, 1891, 'Explor. Tunisie, Fourmis,' p. 12. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 89.

*Messor barbarus* subsp. *punctatus* REICHENSBERGER, 1913, Zool. Jahrb. Abt. Syst., XXXV, pp. 187, 198, 201, and 203. WASMANN, 1918, Tijdschr. v. Ent., LX, (1917), p. 396.

Type locality: Kashmir, INDIA.

ABYSSINIA: Abuker; Diré Daua; Harar (Kristensen); southern Abyssinia (Hg).

1a. Subsp. **latinodus** SANTSCHI, 1917, Bull. Soc. Hist. Nat. Afr. Nord, VIII, p. 93, fig. 2, 2 (♀).

Type locality: East Africa (?) (Reichensperger).

1b. Subsp. **lubberti** FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 13 (♀).

*Messor barbarus* subsp. *lubberti* ARNOLD, 1920, Ann. South African Mus., XIV, p. 411 (♀).

Type locality: Okahandja, GERMAN SOUTHWEST AFRICA (Peters).

GERMAN SOUTHWEST AFRICA: (Lübbert).

1c. Subsp. **ruginodis** STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 374, fig. 1 (♀).

Type locality: Fort Crampel, FRENCH CONGO (Schubotz).

1d. Subsp. **semirufus** (ERN. ANDRÉ) EMERY, 1908, Deutsch. Ent. Zeitschr., pp. 445 and 447 (2, ♀, ♀).

*Aphenogaster barbara* var. *semirufa* ERN. ANDRÉ, 1883, 'Spec. Hym. Europ. Algérie,' II, pp. 355 and 368 (♂, ♀).

Type locality: not designated; described from the shores of the CASPIAN SEA, SYRIA, PERSIA, and ABYSSINIA.

1d<sub>1</sub>. Var. **angularis** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 75 (♀).

Type locality: Naivasha, 1900 m., BRITISH EAST AFRICA (Alluaud and Jeannel).

1d<sub>2</sub>. Var. **galla** EMERY, 1908, Deutsch. Ent. Zeitschr., p. 447, footnote. FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 250 (♀). ESCHERICH, 1911, Biol. Centralbl., XXXI, p. 48, footnote. KARAWAIEW, 1911, Rev. Russe Ent., XI, p. 3 (♀). EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 3 (♀, ♀, ♂).

*Aphenogaster* (Messor) *barbarus* EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 112.

*Stenammas* (Messor) *barbarum* subsp. *caduca* var. *galla* EMERY, 1895, ibid., XXXV, p. 179 (♀).

*Messor barbarus* subsp. *caducus* var. *galla* EMERY, 1897, ibid., XXXVIII, p. 597.

*Stenammas* (Messor) *barbarum* var. *galla* MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicid.,' p. 5; in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 14 (♀, ♀).

*Messor barbarus* subsp. *galla* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 335 (♀); 1917, Bull. Soc. Hist. Nat. Afr. Nord, VIII, p. 92, fig. 2, 1 (♀).

Type locality: Boran Galla, Upper Ganale, ABYSSINIA (V. Bottego).

SENEGAMBIA: Dakar; Thiès (F. Silvestri); Longa. ANGLO-EGYPTIAN SUDAN: Khartum (Karawaiew); White Nile Region (I. Trägårdh). ABYSSINIA: (Ilg); Webi; Ogaden (Bricchetti-Robecchi); Kaka, Schoa (Antinori). SOMALILAND: Milmil (Ruspoli); Mogadiscio; Errer-es-Saghir (Bricchetti-Robecchi); Obbia (Pavesi). ERITREA: Asmara; Keren; Nefasit (F. Silvestri); Bogos (Antinori). GERMAN EAST AFRICA: Mt. Meru; Kibonoto, Mt. Kilimanjaro (Sjöstedt).

1d. Var. *rufulus* FOREL, 1918, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 156.

*Messor barbarus* subsp. *semirufus* var. *rufa* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 250 (♀). ESCHERICH, 1911, Biol. Centralbl., XXXI, p. 48, footnote. KARAWAIEW, 1911, Rev. Russe Ent., XI, p. 4 (♀). (*nec rufa* Karawaiew, 1909).

Type locality: Nefasit, ERITREA (K. Escherich).

ANGLO-EGYPTIAN SUDAN: Khartum (Karawaiew).

1d. Var. *triempressus* (SANTSCHI).

*Messor barbarus* subsp. *galla* var. *triempressa* SANTSCHI, 1917, Bull. Soc. Hist. Nat. Afr. Nord, VIII, p. 92 (♀).

Type locality: Baguirmi, Techeckna, Chari-Chad.

CASAMANCE: (Claveau). ABYSSINIA: Harar; Schoa.

2. *Messor braunsi* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 138 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 413 (♀).

Type locality: Willowmore, CAPE PROVINCE (H. Brauns).

3. *Messor capensis* (MAYR).

*Atta capensis* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 743 (♀); 1863, *ibid.*, XIII, p. 396.

*Aphænogaster capensis* ROGER, 1863, 'Verzeich. Formicid.,' p. 30. MAYR, 1865, 'Reise Novara, Zool.,' II, Formicidæ, p. 87 (♀), Pl. III, fig. 25; 1866, Verh. Zool. Bot. Ges. Wien, XVI, p. 896 (♀, ♂), Pl. XX, fig. 9. EMERY, 1884, Ann. Mus. Civ. Genova, XXI, p. 383 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 101.

*Aphænogaster barbara* var. *capensis* PÉRINGUEY, 1886, Trans. Ent. Soc. London, Proc., p. xxxvii. WASMANN, 1894, 'Verzeichn. Myrmecoph. Termitoph. Arthrop.,' p. 113. DIXEY and LONGSTAFF, 1907, Trans. Ent. Soc. London, p. 340.

*Stenamma* (*Messor*) *barbarum* subsp. *capense* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 35.

*Aphænogaster* (*Messor*) *barbara* var. *capensis* WASMANN, 1896, Notes Leyden Mus., XVIII, p. 75.

*Aphænogaster barbara* subsp. *capensis* BINGHAM, 1906, Trans. Ent. Soc. London, Proc., p. xxv (♀, ♂).

*Messor barbarus* subsp. *capensis* ARNOLD, 1913, Proc. Rhodesia Sc. Assoc., XII, p. 14. FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 242 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 405 (♀, ♀, ♂).

*Stenamma* (*Aphænogaster*) *capense* REICHENSBERGER, 1915, Med. Göteborgs Mus. Zool. Afd., V, p. 16.

Type locality: Cape of Good Hope (Novara Expedition).

CAPE PROVINCE: Cape Town (E. Simon); Kimberley (Dixey and Longstaff); Willowmore (G. Arnold). TRANSVAAL: Makapan; Pretoria (E. Simon). NATAL: Durban (G. Arnold); Wessels Neck (C. B. Cooper).

31. Var. **probus** (FOREL).

*Messor barbarus* subsp. *capensis* var. *probus* FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 266 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 410 (♀).

Type locality: Bothaville, ORANGE FREE STATE (H. Brauns).

32. Var. **schenki** (FOREL).

*Messor barbarus* subsp. *capensis* var. *schenki* FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 15 (♀).

*Messor barbarus* subsp. *capensis* var. *schenki* ARNOLD, 1920, Ann. South African Mus., XIV, p. 410 (♀).

Type locality: Bethanien, GERMAN SOUTHWEST AFRICA (Schenck).

33. Var. **tropicorum** (FOREL).

*Messor barbarus* subsp. *capensis* var. *tropicorum* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 444 (♀).

Type locality: MOSSAMEDES (Baum and Van der Kellen).

3a. Subsp. **decipiens** (FOREL) SANTSCHI, 1917, Bull. Soc. Hist. Nat. Afr. Nord, VIII, p. 94.

*Stenamma* (*Messor*) *barbarum* subsp. *capense* var. *decipiens* FOREL, 1905, Ann. Soc. Ent. Belgique, XLIX, p. 177 (♀, ♀).

*Messor barbarus* subsp. *capensis* var. *decipiens* FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 15 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 410 (♀).

Type locality: NATAL (R. C. Wroughton).

CAPE PROVINCE: Cape Flats near Cape Town (L. Schultze).

3b. Subsp. **pseudægyptiacus** (EMERY).

*Aphænogaster pseudægyptiaca* EMERY, 1884, Ann. Mus. Civ. Genova, XXI, p. 384 (♀).

*Aphænogaster* (*Messor*) *barbarum* subsp. *capensis* var. *pseudo-ægyptiaca* EMERY, 1891, 'Explor. Tunisie, Fourmis,' p. 12.

*Stenamma* (*Messor*) *barbarum* subsp. *capense* var. *pseudo-ægyptiacum* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 35.

*Messor capensis* subsp. *pseudo-ægyptiaca* SANTSCHI, 1917, Bull. Soc. Hist. Nat. Afr. Nord, VIII, p. 94.

*Messor barbarus* subsp. *capensis* var. *pseudoægyptiaca* ARNOLD, 1920, Ann. South African Mus., XIV, p. 408 (♀, ♀, ♂), Pl. v, figs. 59 and 59a-b.

Type locality: Cape of Good Hope (L. Péringuey).

TRANSVAAL: Makapan (E. Simon). RHODESIA: Bulawayo (G. Arnold).

4. **Messor cephalotes** EMERY, 1908, Deutsch. Ent. Zeitschr., p. 443.

*Stenamma* (*Messor*) *barbarum* subsp. *cephalotes* EMERY, 1895, Ann. Mus. Civ. Genova, XXXV, p. 179 (♀); 1897, *ibid.*, XXXVIII, p. 597 (♀). FOREL, 1901, Mitt. Naturh. Mus. Hamburg, XVIII, p. 61 (♀).

*Stenamma* (*Messor*) *barbarum* var. *cephalotes* MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 14.

Type locality: Arussi Galla, Ganale Gudda, ABYSSINIA (V. Bottego).

ABYSSINIA: Giari Bule (Ruspoli). BRITISH EAST AFRICA: Leitokitok, Ngare Rongai (Sjöstedt).

4a. Subsp. **plinii** SANTSCHI, 1917, Bull. Soc. Hist. Nat. Afr. Nord, VIII, p. 94. *Messor plinii* SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, p. 165 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 75 (♀).

Type locality: Nakuru, Rift Valley, 1820 m., BRITISH EAST AFRICA (Ch. Alluaud).  
BRITISH EAST AFRICA: Tehania-Kamiti, Kikuyu (Alluaud and Jeannel).

5. **Messor denticornis** FOREL, in Schultze, 1910, 'Forschungsreise in Süd-afrika,' IV, p. 14 (♀, ♀, ♂), Pl. I, figs. 1 and 3. ARNOLD, 1920, Ann. South African Mus., XIV, p. 411 (♀, ♀, ♂).

Type locality: Lüderitz Bay, GERMAN SOUTHWEST AFRICA (L. Schultze).

GERMAN SOUTHWEST AFRICA: Ababis (R. W. Tucker). CAPE PROVINCE: Kamaggas; Steinkopf (L. Schultze); Kimberley (G. Arnold).

51. Var. **brunni** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 444 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 413 (♀).

Type locality: SOUTHWEST AFRICA (Brunn).

CAPE PROVINCE: Steekstown (Wartmann).

52. Var. **parvidens** FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 15 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 413 (♀).

Type locality: Kubub, GERMAN SOUTHWEST AFRICA (L. Schultze).

#### **Pheidole** WESTWOOD

*Pheidole* WESTWOOD, 1840, Ann. Mag. Nat. Hist., VI, p. 87.

*Leptomyrma* MOTSCHULSKY, 1863, Bull. Soc. Nat. Moscou, XXXVI, p. 17.

*Phidole* BINGHAM, 1903, 'Fauna Brit. India, Hym.,' II, p. 220.

*Ecophthora* HEER, 1852, 'Hausameise Madeiras,' p. 15.

*Aphænogaster* (part) EMERY. *Atta* (part) SYKES, F. SMITH. *Formica* (part) FABRICIUS et auct. *Myrmica* (part) SMITH et auct. *Ecodoma* (part) JERDON, MCGRIDGE. *Pristomyrmex* MAYR.

Genotype: *Atta providens* Sykes, 1835.

All the Ethiopian species belong to the subgenus *Pheidole*, *sensu stricto*.

1. **Pheidole æberlii** FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 91 (♀, ♂); 1904, Ann. Soc. Ent. Belgique, XLVIII, p. 172.

*Pheidole æberlei* MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicid.,' p. 7 (♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Pórtici, VIII, p. 337 (♀). EMERY, 1916, Rev. Zool. Afr., IV, p. 250.

Type locality: Upper Senegal, SENEGAMBIA.

SENEGAMBIA: Thiès (F. Silvestri). ANGLO-EGYPTIAN SUDAN: Ondurman (I. Trägårdh).

1a. Subsp. **erythræa** EMERY, 1916, Rev. Zool. Afr., IV, p. 250.

*Pheidole æberlii* var. *erythræa* EMERY, 1901, Bull. Soc. Ent. Italiana, XXXIII, p. 61 (♀, ♀).

Type locality: Massaua, ERITREA (Belli).

ERITREA: Ghinda (Belli).

2. **Pheidole akermani** ARNOLD, 1920, Ann. South African Mus., XIV, pp. 419 and 471 (♀, ♀).

Type locality: Pietermaritzburg, NATAL (C. Akerman).

3. **Pheidole areniphila** FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 30; 1910, Ann. Soc. Ent. Belgique, LIV, p. 14. ARNOLD, 1920, Ann. South African Mus., XIV, p. 479 (♀, ♀, ♂).

*Pheidole arenicola* FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 11. (♂, ♀, ♂).

Type locality: Khakhea, BECHUANALAND (L. Schultze).

4. *Pheidole arnoldi* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 130 (♂, ♀); 1913, Deutsch. Ent. Zeitschr., Beih., p. 213 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 418 and 445, fig. 25 (♂, ♀, ♂).

Type locality: Bulawayo, RHODESIA (G. Arnold).

SOUTHERN RHODESIA: common (G. Arnold).

41. Var. *ballaensis* ARNOLD, 1920, Ann. South African Mus., XIV, p. 448 (♂, ♀).

Type locality: Balla-Balla, SOUTHERN RHODESIA (G. Arnold).

42. Var. *rufescens* ARNOLD, 1920, Ann. South African Mus., XIV, p. 449 (♂, ♀).

Type locality: Sipapoma, SOUTHERN RHODESIA (G. Arnold).

SOUTHERN RHODESIA: Victoria Falls (G. Arnold).

5. *Pheidole aspera* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 746 (♂, ♀); 1863, *ibid.*, XIII, p. 440. ROGER, 1863, 'Verzeich. Formicid.,' p. 31. MAYR, 1865, 'Reise Novara, Zool.,' II, Formicidæ, p. 97 (♂, ♀, ♂), Pl. III, fig. 26. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 88. ARNOLD, 1920, Ann. South African Mus., XIV, p. 477 (♂, ♀).

Type locality: Cape of Good Hope (Novara Expedition).

6. *Pheidole aurivillii* MAYR, 1896, Ent. Tidskr., XVII, p. 238 (♂, ♀). SJÖSTEDT, 1904, 'I Västafrikas Urskogar,' p. 29. SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 369 (♂, ♀, ♂); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 337 (♂, ♀).

Type locality: CAMEROON (Sjöstedt).

FRENCH GUINEA: Kakoulima (F. Silvestri). FRENCH CONGO: Brazzaville (A. Weiss).

61. Var. *attenuata* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 370 (♂). See p. 129.

Type locality: M'Piaka, FRENCH CONGO (A. Weiss).

BELGIAN CONGO: Medje; Bafwabaka (Lang and Chapin); Walikale to Lubutu (J. Bequaert).

62. Var. *rubricalva* FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 337 (♂, ♀).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

6a. Subsp. *kasaiensis* FOREL, 1911, Rev. Zool. Afr., I, p. 279 (♂, ♀); 1913, *ibid.*, II, p. 353 (♂, ♀). LAMBORN, 1914, Trans. Ent. Soc. London, (1913), p. 443 (♀). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 415 (♂, ♀, ♀).

Type locality: Kondué, BELGIAN CONGO (Luja).

BELGIAN CONGO: St. Gabriel (Kohl). SOUTHERN NIGERIA: Lagos (Lamborn).

6a1. Var. *amaricæ* FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 336 (♂, ♀).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

7. *Pheidole batrachorum* WM. M. WHEELER. See p. 128. (♂, ♀).

Type locality: Akenge, BELGIAN CONGO (Lang and Chapin).

8. *Pheidole bequaerti* FOREL, 1913, Rev. Zool. Afr., II, p. 330 (♂, ♀). BEQUAERT, *ibid.*, p. 427.

Type locality: Lake Kabwe, BELGIAN CONGO (J. Bequaert).

9. **Pheidole buchholzi** MAYR, 1900, Ent. Tidskr., XXI, p. 276 (♂, ♀). FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 436 (♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 336 (♀). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 413 (♀, ♀).

Type locality: Mungo River, CAMEROON (R. Buchholz).

CAMEROON: (L. v. Muralt); Victoria (F. Silvestri). BELGIAN CONGO: Makanga (Kohl).

10. **Pheidole caffra** EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 33 (♂). SANTSCHI, 1910, *ibid.*, LXXVIII, (1909), p. 361 (♂). ARNOLD, 1920, Ann. South African Mus., XIV, p. 478 (♂).

Type locality: Hamman's Kraal, TRANSVAAL (E. Simon).

FRENCH CONGO: Brazzaville (A. Weiss).

10<sub>1</sub>. Var. **amœna** FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 365 (♂).

Type locality: ERITREA.

10<sub>a</sub>. Subsp. **abyssinica** FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 254 (♂, ♀). REICHENSPERGER, 1913, *ibid.*, XXXV, p. 193.

*Pheidole caffra* subsp. *abessinica* WASMANN, 1911, Tijdschr. v. Ent., LIV, p. 199; 1918, *ibid.*, LX, (1917), p. 395.

Type locality: Ghinda, ERITREA (K. Escherich).

ABYSSINIA: Bisa Timo near Harar; Harar (Kristensen). ERITREA: Nefasit (K. Escherich).

10<sub>b</sub>. Subsp. **bayeri** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 413 (♂, ♀).

Type locality: Kasindi, BELGIAN CONGO (Bayer).

10<sub>b</sub><sub>1</sub>. Var. **thysvillensis** WM. M. WHEELER. See p. 130 (♂, ♀).

Type locality: Thysville, BELGIAN CONGO (Lang and Chapin; J. Bequaert).

10<sub>c</sub>. Subsp. **senilifrons** WM. M. WHEELER. See p. 130 (♂, ♀).

Type locality: Yakuluku, BELGIAN CONGO (Lang and Chapin).

11. **Pheidole capensis** MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 746 (♂, ♀); 1863, *ibid.*, XIII, p. 440. ROGER, 1863, 'Verzeich. Formicid.,' p. 31. MAYR, 1865, 'Reise Novara, Zool.,' II, Formicidæ, p. 100 (♂, ♀), Pl. IV, fig. 29. PÉRINGUEY, 1886, Trans. Ent. Soc. London, Proc., p. xxxvi. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 89. WASMANN, 1894, 'Verzeich. Myrmecoph. Termitoph. Arthrop.,' pp. 115 and 118. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 134 (♂, ♀). WASMANN, 1896, Notes Leyden Mus., XVIII, p. 76. FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 130 (♂, ♀, ♀). REICHENSPERGER, 1913, Zool. Jahrb. Abt. Syst., XXXV, pp. 203 and 204; 1915, Med. Göteborgs Mus. Zool. Afd., V, p. 42. EMERY, 1916, Rev. Zool. Afr., IV, p. 246, figs. 9a-b (♂, ♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 419 and 441, fig. 23 (♂, ♀, ♀).

*Pheidole megacephala* subsp. *capensis* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 34. WASMANN, 1911, Tijdschr. v. Ent., LIV, p. 199. REICHENSPERGER, 1915, Med. Göteborgs Mus. Zool. Afd., V, p. 72.

Type locality: Cape of Good Hope (Novara Expedition).

CAPE PROVINCE: Willowmore (H. Brauns); Cape Town; Kimberley (E. Simon).

11<sub>1</sub>. Var. **dregei** EMERY, 1916, Rev. Zool. Afr., IV, p. 246, fig. 9a (♂). ARNOLD, 1920, Ann. South African Mus., XIV, p. 443 (♂).

*Pheidole megacephala* subsp. *dregei* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 34 (♂).

Type locality: Kimberley, CAPE PROVINCE (E. Simon).

TRANSVAAL: Makapan (E. Simon). ORANGE FREE STATE: Bloemfontein (E. Simon). PORTUGUESE EAST AFRICA: Delagoa Bay.

11. Var. **modestior** SANTSCHI, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 337 (♂, ♀).

Type locality: Majuba Neck, CAPE PROVINCE (G. Arnold).

NATAL.

11a. Subsp. **redenburgensis** (FOREL) EMERY, 1916, Rev. Zool. Afr., IV, p. 246, fig. 9c (♂).

*Pheidole* (*Allophaidole*) *cutensis* subsp. *redenburgensis* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 135 (♂, ♀, ♀, ♂).

*Pheidole cutensis* subsp. *redenburgensis* FOREL, 1917, Bull. Soc. Vaudoise Sc. Nat., (5) LI, p. 721.

*Pheidole* (*Allophaidole*) *cutensis* subsp. *reddersburgensis* ARNOLD, 1920, Ann. South African Mus., XIV, pp. 418 and 450, fig. 26 (♂, ♀, ♀, ♂).

Type locality: Reddersburg, ORANGE FREE STATE (H. Brauns).

12. **Pheidole clavata** EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 114. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 89. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 134.

*Aphaenogaster clavata* EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 372 (♀).

Type locality: Keren, Bogos, ERITREA (Beccari).

13. **Pheidole concinna** SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 362 (♂, ♀, ♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

14. **Pheidole crassinoda** EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 32 (♂, ♀). FOREL, 1894, Mitth. Schweiz. Ent. Ges., VIII, p. 94 (without description). MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 134; in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 12 (♂, ♀, ♀, ♂). FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 253 (♂, ♀, ♀); in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 9 (♂, ♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 77 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 420 and 472 (♂, ♀).

Type locality: Makapan, TRANSVAAL (E. Simon).

GERMAN SOUTHWEST AFRICA: Damaraland (Ganz); Okahandja (Casper); Herero. BECHUANALAND: Lehututu (L. Schultze). NATAL: Verulam (Weitzecker). DELAGOA: (Liengine). GERMAN EAST AFRICA: Tanga (Alluaud and Jeannel); Kibonoto, Mt. Kilimanjaro; Ngare-na-Nyuki, Mt. Meru (Sjöstedt). WEST ABYSSINIA: (Ilg).

14i. Var. **pluto** ARNOLD, 1920, Ann. South African Mus., XIV, p. 473 (♂, ♀).

Type locality: Amatongas Forest, PORTUGUESE EAST AFRICA (G. Arnold).

14a. Subsp. **ruspolii** EMERY, 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 597 (♂, ♀). FOREL, 1907, Rev. d'Ent. Caen, XXVI, p. 138 (♀, ♂). STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exped. (1907-08),' III, p. 385 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 77 (♂, ♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 474 (♂, ♀, ♀, ♂), Pl. vi, figs. 63-66.



*Pheidole crassinoda* var. *ruspolii* FOREL, 1904, Ann. Mus. Zool. Acad. Sc. St. Pétersbourg, VIII, (1903), p. 373 (2).

Type locality: Giari Bule, ABYSSINIA (Ruspoli).

SOMALILAND: Arigalgalu (Ruspoli). ABYSSINIA: Ogaden (Ruspoli); Karssa (de Rothschild). ANGLO-EGYPTIAN SUDAN: Godo Burka (Dmitriev). BELGIAN CONGO: Kassenje, Lake Albert (Schubotz). BRITISH EAST AFRICA: Mbuyuni, Pori, 1100 m. (Alluaud and Jeannel). RHODESIA: Bulawayo (G. Arnold).

15. *Pheidole cuitensis* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 437 (2, ♀); 1917, Bull. Soc. Vaudoise Sc. Nat., (5) LI, p. 721. EMERY, 1916, Rev. Zool. Afr., IV, p. 246.

Type locality: Between the Cuito River and the Cubango River, MOSSAMEDES (Baum and Van der Kellen).

16. *Pheidole escherichi* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 254 (2, ♀, ♀).

Type locality: Ghinda, ERITREA (K. Escherich).

17. *Pheidole excellens* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 744 (2); 1863, *ibid.*, XIII, p. 440. ROGER, 1863, 'Verzeich. Formicid.,' p. 30. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 90. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 134. SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 335 (♀).

Type locality: GOLD COAST.

FRENCH GUINEA: Kindia; Konakry (F. Silvestri). SLAVE COAST. TOGO: Bismarckburg.

17a. Subsp. *rhodesiana* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 131 (2, ♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 419 and 469 (2, ♀, ♂), Pl. VI, fig. 69.

Type locality: Bulawayo, RHODESIA (G. Arnold).

17b. Subsp. *weissi* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 361 (2); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 335 (2, ♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

NIGERIA: Lagos (F. Silvestri).

18. *Pheidole foreli* MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 8 (2, ♀). FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 12 (♀). WASMANN, 1911, Tijdschr. v. Ent., LIV, p. 199. FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 241 (2, ♀). REICHENSPERGER, 1915, Med. Göteborgs Mus. Zool. Afd., V, pp. 34, 45, and 73. EMERY, 1916, Rev. Zool. Afr., IV, p. 245. ARNOLD, 1920, Ann. South African Mus., XIV, pp. 417 and 432 (2, ♀, ♀).

Type locality: Sunday River Mts. (2400 ft.), near Port Elizabeth, CAPE PROVINCE (H. Brauns).

CAPE PROVINCE: Deep River near Cape Town in the Cape Flats (L. Schultze); Knysna (H. Brauns). ORANGE FREE STATE: Bothaville; Reddersburg (H. Brauns). NATAL: Estcourt (R. C. Wroughton).

18a. Var. *pubens* FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 12 (2, ♀); 1910, Ann. Soc. Ent. Belgique, LIV, p. 436 (♀, ♀, ♂). ARNOLD, 1920, Ann. South African Mus., XIV, p. 434 (2, ♀).

Type locality: NATAL (R. C. Wroughton; Haviland).

19. *Pheidole irritans* (SMITH) DIXEY and LONGSTAFF, 1907, Trans. Ent. Soc. London, pp. 331, 332, and 371.

*Myrmica irritans* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 127 (♀).  
ROGER, 1863, 'Verzeich. Formicid.,' p. 33. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 433. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 110.

Type locality: Port Natal, NATAL.

CAPE PROVINCE: Nahoon River (Dixey and Longstaff). NATAL: Colenso; Howick (Dixey and Longstaff).

20. *Pheidole jordanica* DE SAULCY, 1874, Bull. Soc. Hist. Nat. Metz, XIII, p. 17 (♂, ♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 91. EMERY, 1916, Rev. Zool. Afric., IV, p. 233, figs. 4a-c (♂, ♀).

*Pheidole megacephala* subsp. *jordanica* EMERY, 1889, Ann. Mus. Civ. Genova, XXVII, p. 442 (♂, ♀).

*Pheidole sinaitica* WASMANN, 1894, 'Verzeichn. Myrmecoph. Termitoph. Arthrop.,' p. 119 (nec Mayr).

*Pheidole sinaitica* subsp. *laticeps* MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicidæ,' p. 6 (♂, ♀) (not "*latifrons*" as quoted by Emery, 1916).

*Pheidole schmitzi* FOREL, 1911, Rev. Suisse Zool., XIX, p. 455 (♂, ♀, ♀).

*Pheidole sinaitica* var. *laticeps* KARAWAIEW, 1911, Rev. Russe Ent., XI, p. 7 (♂, ♀).

Type locality: Jericho, PALESTINE (Piochard de la Brûlerie).

CYRENAICA, EGYPT. ANGLO-EGYPTIAN SUDAN: Khartum; Port Sudan (Karawaiew).

21. *Pheidole kitcheneri* FOREL, emend.

*Pheidole kilschneri* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 436 (♂, ♀?).  
ARNOLD, 1920, Ann. South African Mus., XIV, p. 479 (♂, ♀?).

*Pheidole kilscheneri* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 76 (♂, ♀, ♀).

Type locality: Mountains of NATAL (R. C. Wroughton).

BRITISH EAST AFRICA: Cheteni; Fort Hall, Wa-Kikuyu, 1330 m.; Tchania River, 1520 m. (Alluaud and Jeannel).

22. *Pheidole kohli* MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 11, footnote (♂, ♀). See p. 131.

Type locality: Waboniland, BRITISH EAST AFRICA.

BELGIAN CONGO: Medje; Garamba (Lang and Chapin).

23. *Pheidole liengmei* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 93 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 134 (♂, ♀). SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 23 (♀). REICHENSFELDER, 1915, *ibid.*, V, p. 18. LAMBORN, 1920, Trans. Ent. Soc. London, (1919), Proc., pp. liii and lv. ARNOLD, 1920, Ann. South African Mus., XIV, pp. 419 and 465, fig. 30 (♂, ♀, ♀), Pl. vi, fig. 71.

Type locality: Delagoa, PORTUGUESE EAST AFRICA (Liengme).

ZULULAND: Mkosi (I. Trägårdh). RHODESIA: Bulawayo; Rhodesia Falls (G. Arnold). GERMAN EAST AFRICA: Lindi (Lamborn).

23a. Var. *malindana* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 135 (♀).  
ARNOLD, 1920, Ann. South African Mus., XIV, p. 468 (♀).

Type locality: Malindi, SOUTHERN RHODESIA (G. Arnold).

23b. Var. *shinsendensis* FOREL, 1913, Rev. Zool. Afr., II, p. 327 (♀).

*Pheidole liengmei* var. *shinsendensis* BEQUAERT, 1913, *ibid.*, II, p. 426.

*Pheidole liengmei* var. *shinsendensis* ARNOLD, 1920, Ann. South African Mus., XIV, p. 468 (♂, ♀).

- Type locality: Shinsenda, BELGIAN CONGO (J. Bequaert).  
 RHODESIA: Bembesi (G. Arnold).  
 23a. Subsp. *micrartifex* FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 215 (2, ♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 468 (2, ♀).  
 Type locality: Bulawayo, RHODESIA (G. Arnold).  
 24. *Pheidole maufei* ARNOLD, 1920, Ann. South African Mus., XIV, pp. 418 and 438, fig. 22a (2, ♀).  
 Type locality: Belingwe, SOUTHERN RHODESIA (G. Arnold).  
 25. *Pheidole mayri* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 91 (2, ♀).  
 Type locality: Senegal.  
 26. *Pheidole megacephala* (FABRICIUS) ROGER, 1863, 'Verzeich. Formicid.,' pp. 30 and 49. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 441. MORRIS, 1880, American Naturalist, XIV, pp. 667-670. FOREL, 1881, Mitth. München. Ent. Ver., V, p. 8 (♀). LUBBOCK, 1882, 'Ants, Bees and Wasps,' 5th Ed., pp. 20, 180, and 233 (♀), Pl. II, figs. 3 and 4. ERN. ANDRÉ, 1883, 'Spec. Hym. Europ. Algérie,' II, pp. 383, 385, and 386 (2, ♀, ♀, ♂). PÉRINGLEY, 1886, Trans. Ent. Soc. London, Proc., p. xxxvi. BLACKBURN and CAMERON, 1886, Mem. Manchester Lit. Phil. Soc., (3) X, p. 236. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 92. MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 201. WASMANN, 1894, 'Verzeichn. Myrmecoph. Termitoph. Arthrop.,' pp. 115, 116, 118, and 119. MAYR, 1896, Ent. Tidskr., XVII, p. 238. WASMANN, 1896, Notes Leyden Mus., XVIII, p. 76. EMERY, 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 598 (♀). H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 40. WASMANN, 1899, Deutsch. Ent. Zeitschr., p. 406. MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicid.,' p. 7. WASMANN, 1904, Notes Leyden Mus., XXV, p. 45. MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 13. DIXEY and LONGSTAFF, 1907, Trans. Ent. Soc. London, pp. 332 and 336. SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 370. WASMANN, 1911, Tijdschr. v. Ent., LIV, p. 198. REICHENSBERGER, 1913, Zool. Jahrb. Abt. Syst., XXXV, pp. 203, 212, and 215. SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 336 (♀, ♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 75 (2, ♀, ♀); 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 22 (2, ♀, ♀). TRÄGÅRDH, *ibid.*, p. 44. ALLUAUD and JEANNEL, 1914, Arch. Zool. Gén. Exp., LIII, p. 366. EMERY, 1916, Rev. Zool. Afr., IV, pp. 235 and 238. WASMANN, 1918, Tijdschr. v. Ent., LX, (1917), p. 395. SANTSCHI, 1920, 'Études Maladies Parasites Cacaoyer S. Thomé,' X, p. 2 (2, ♀, ♀). See pp. 131 and 1018.  
*?Formica edax* FORSKÅL, 1775, 'Descr. Anim.,' p. 84.  
*Formica megacephala* FABRICIUS, 1793, 'Ent. Syst.,' II, p. 361. COQUEBERT, 1799, 'Illustr. Iconogr. Ins.,' I, p. 26 (♂, ♀), Pl. VI, fig. 9. LATREILLE, 1802, 'Hist. Nat. Fourmis,' p. 232 (♀), Pl. X, fig. 67. FABRICIUS, 1804, 'Syst. Piez.,' p. 411.  
*Formica (Myrmica) trinodis* LOSANA, 1834, Mem. Accad. Sc. Torino, XXXVII, p. 327, Pl. XXXVI, fig. 6.  
*Ecophthora pusilla* HEER, 1852, 'Hausameise Madeiras,' p. 15 (2, ♀, ♀, ♂), Pl. I, figs. 1-4. BROWN, 1869, Proc. Boston Soc. Nat. Hist., XII, p. 211.  
*Myrmica? laevigata* SMITH, 1855, Trans. Ent. Soc. London, (2) III, p. 130 (♀), Pl. IX, figs. 7 and 8.  
*Myrmica trinodis* MAYR, 1855, Verh. Zool. Bot. Ges. Wien, V, p. 414, footnote (♂).

*Myrmica* (*Pheidole*) *laevigata* F. SMITH, 1858, 'Cat. Brit. Fossor. Hym.,' pp. 35 and 225 (♀).

*Pheidole pusilla* F. SMITH, *ibid.*, p. 173, Pl. ix, figs. 18-20. MAYR, 1861, 'Europ. Formicid.,' p. 70 (♂, ♀, ♀); 1870, Verh. Zool. Bot. Ges. Wien, XX, pp. 981 and 984 (♂, ♀); in Fedtschenko, 1877, 'Voy. Turkestan, Formicid.,' p. 18; 1878, Verh. Zool. Bot. Ges. Wien, XXVIII, pp. 674 and 676 (♂, ♀). BLACKBURN and KIRBY, 1880, Ent. Monthly Mag., XVII, p. 89. MAYR, 1887, Verh. Zool. Bot. Ges. Wien, XXXVII, pp. 597 and 606 (♂, ♀).

*Pheidole janus* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 175 (♀), Pl. ix, figs. 13-17. MAYR, 1886, Verh. Zool. Bot. Ges. Wien, XXXVI, p. 360.

?*Ecophthora perniciosus* GERSTAECKER, 1858, Monatsb. Ak. Wiss. Berlin, p. 263 (♀); in Peters, 1862, 'Reise n. Mossambique, Zool.,' V, p. 516 (♀).

*Myrmica laevigata* F. SMITH, 1859, Zoologist, XVII, p. 6385; 1862, Ent. Annual, p. 70 (♀, ♀), Pl., figs. 4, 7, 8.

*Pheidole laevigata* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 747 (♂). WHITE, 1883, 'Ants and Their Ways,' p. 270 (♀).

?*Pheidole perniciosus* MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 441. ROGER, 1863, 'Verzeich. Formicid.,' p. 31. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 94.

*Pheidole megacephala* subsp. *pusilla* EMERY, 1916, Rev. Zool. Afr., IV, pp. 235 and 239, fig. 1a (♂); 1919, *ibid.*, VI, p. 170, fig. 5a (♂).

*Pheidole megacephala* var. *pusilla* SANTSCI, 1920, 'Études Maladies Parasites Cacaoyer S. Thomé,' X, p. 2 (♂, ♀).

Type locality: MAURITIUS (= Isle de France).

Cosmopolitan in tropical and subtropical regions.

SENEGAMBIA: Dakar (F. Silvestri). CAMEROON: Sjöstedt. SAN THOMÉ (de Seabra). FRENCH CONGO: Brazzaville (A. Weiss). BELGIAN CONGO: (Kohl); Malela; Matadi; Thysville; Boma (J. Bequaert); Zambi; Banana; Niangara; Akenge; Stanleyville (Lang and Chapin). ANGOLA: St. Paul de Loanda (F. Silvestri). CAPE PROVINCE: Cape Town (Raffray). NATAL: Stamford Hill (I. Trägårdh); Colenso (Dixey and Longstaff). ZULULAND: Junction of the Umfolosi Rivers (I. Trägårdh). TRANSVAAL: Johannesburg (Dixey and Longstaff). PORTUGUESE EAST AFRICA: Tete (Peters). GERMAN EAST AFRICA: Tanga; New Moschi, Mt. Kilimanjaro, 800 m. (Alluaud and Jeannel); Kibonoto, Kilimanjaro; Usambara (Sjöstedt); Bagamoyo; Kihengo (Stuhlmann). ZANZIBAR: (Stuhlmann). BRITISH EAST AFRICA: Shimoni; Ramisi River; Naivasha, Rift Valley, 1900 m.; Nairobi; Port Florence, Kavirondo Bay (Alluaud and Jeannel). ABYSSINIA: Ogaden (Ruspoli); Harar (Kristensen). ANGLO-EGYPTIAN SUDAN: Abba Island, White Nile (I. Trägårdh).

26a. Subsp. *ilgi* (FOREL) EMERY, 1916, Rev. Zool. Afr., IV, pp. 236 and 244. See p. 132.

*Pheidole rotundata* subsp. *ilgi* FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 82 (♂, ♀); 1907, Rev. d'Ent. Caen, XXVI, p. 139 (♂, ♀, ♀, ♂); 1913, Ann. Soc. Ent. Belgique, LVII, p. 128 (♂, ♀). REICHENSPERGER, 1913, Zool. Jahrb. Abt. Syst., XXXV, pp. 191 and 195; 1915, Ent. Mitt. Deutsch. Ent. Mus. Berlin, IV, p. 123. H. SCHMITZ, 1916, Zoolog. Meded. Mus. Leiden, II, p. 28, footnote. WASMANN, 1918, Tijdschr. v. Ent., LX, (1917), p. 395.

*Pheidole rotundata* subsp. *impressifrons* var. *ilgii* ARNOLD, 1920, Ann. South African Mus., XIV, pp. 417 and 427 (♂, ♀, ♀, ♂).

Type locality: Harar, ABYSSINIA (Ilg; Kristensen).

ABYSSINIA: Hiéka-Bourka; Karssa; Tchañanani; Kounhi; Adis-Abeba (de Rothschild); Diré Daua (Kristensen). RHODESIA: Bulawayo (G. Arnold). BRITISH EAST AFRICA: Fundu Island near Pemba (Voeltzkow). BELGIAN CONGO: Lesse (J. Bequaert).

26b. Subsp. *impressifrons* WASMANN, 1905, Notes Leyden Mus., XXV, p. 110; 1911, Tijdschr. v. Ent., LIV, p. 199. EMERY, 1916, Rev. Zool. Afr., IV, pp. 236 and 243, figs. 7b and c (♂, ♀).

*Pheidole rotundata* subsp. *impressifrons* FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 213 (♂, ♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 337 (♂, ♀). FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 239 (♂, ♀); 1916, Rev. Suisse Zool., XXIV, p. 416 (♂, ♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 426 (♂, ♀, ♀).

*Pheidole megacephala* subsp. *impressiceps* WASMANN, 1904, Notes Leyden Mus., XXV, pp. 38, 41, 46, and 72, footnote (♂, ♀, ♀) (*nec* Mayr).

*Pheidole punctulata* subsp. *impressifrons* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 127 (♂, ♀, ♀); 1913, Rev. Zool. Afr., II, pp. 328 and 352 (♀). J. BEQUAERT, 1913, *ibid.*, II, p. 427. REICHENSBERGER, 1915, Ent. Mitt. Deutsch. Ent. Mus. Berlin, IV, p. 123. WASMANN, 1918, Tijdschr. v. Ent., LX, (1917), p. 396.

*Pheidole rotundata* var. *impressifrons* LAMBORN, 1914, Trans. Ent. Soc. London, (1913), p. 443.

*Pheidole punctatissima* subsp. *impressifrons* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 22 (♂, ♀). TRÄGÅRDH, *ibid.*, p. 45. REICHENSBERGER, 1915, *ibid.*, V, pp. 10, 14, and 18.

*Pheidole megacephala* subsp. *punctulata* var. *impressiceps* EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 3 (♂, ♀).

Type locality: Port Elizabeth, CAPE PROVINCE (H. Brauns).

SOUTHERN NIGERIA: Lagos (Lamborn). BELGIAN CONGO: (Kohl); Welgelegen (J. Bequaert). RHODESIA: Bulawayo (G. Arnold). TRANSVAAL: Pretoria (F. Silvestri). CAPE PROVINCE: Willowmore (H. Brauns). NATAL: Mountains at 4000 ft. (Haviland). ZULULAND: Junction of Umfolozi (I. Trägårdh). ERITREA: Asmara (F. Silvestri). ABYSSINIA: Harar (Kristensen).

26b<sub>1</sub>. Var. *atrociior* SANTSCHI *in litt.* EMERY, 1916, Rev. Zool. Afr., IV, pp. 236 and 243, fig. 7d (♂).

Type locality: SIERRA LEONE.

26c. Subsp. *melancholica* (SANTSCHI) WASMANN, 1915, Ent. Mitt. Deutsch. Ent. Mus. Berlin, IV, p. 280. EMERY, 1916, Rev. Zool. Afr., IV, pp. 236 and 242, fig. 7a (♂, ♀). See p. 132.

*Pheidole punctulata* subsp. *melancholica* SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, p. 164 (♂, ♀).

*Pheidole punctulata* var. *melancholica* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 337 (♂, ♀, and mermithergate).

Type locality: Jacqueline, IVORY COAST (Lohier).

GOLD COAST: Aburi (F. Silvestri). BELGIAN CONGO: Garamba (Lang and Chapin); St. Gabriel (Kohl).

26c<sub>1</sub>. Var. *angulata* (STITZ) EMERY, 1916, Rev. Zool. Afr., IV, pp. 236 and 243 (♂).

*Pheidole megacephala* subsp. *punctulata* var. *angulata* STITZ, 1911, 'Wiss. Ergebn. Deutsch Zentr. Afr. Exp. (1907-08),' III, p. 385 (♂, ♀).

Type locality: Lake Mohasi, east of Lake Kivu, GERMAN EAST AFRICA (Schubotz).

26c. Var. *costauriensis* (SANTSCHI) EMERY, 1916, Rev. Zool. Afr., IV, pp. 236 and 243, fig. 7a (♂).

*Pheidole rotundata* subsp. *costauriensis* SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 433 (♂); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 337 (♂, ♀); 1915, Ann. Soc. Ent. France, LXXXIV, p. 250 (♀).

Type locality: Winnebah, GOLD COAST.

FRENCH GUINEA: Kindia; Kakoulina (F. Silvestri). SOUTHERN NIGERIA: Ibadan (F. Silvestri).

26d. Subsp. *nkomoana* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 415 (♂, ♀, ♂).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

26e. Subsp. *punctulata* (MAYR) FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 94. WASMANN, 1894, 'Verzeichn. Myrmecoph. Termitoph. Arthrop.', p. 117. FOREL, 1901, Mitth. Schweiz. Ent. Ges., X, p. 311. EMERY, 1901, Bull. Soc. Ent. Italiana, XXXIII, p. 62 (♂). FOREL, in Baum, 1903, 'Kunene-Sambesi Expedition,' p. 564. WASMANN, 1911, Tijdschr. v. Ent., LIV, p. 199. EMERY, 1916, Rev. Zool. Afr., IV, pp. 235 and 241, figs. 6a and 6c (♂, ♀). See pp. 132 and 1019.

*Pheidole punctulata* MAYR, 1866, Verh. Zool. Bot. Ges. Wien, XVI, p. 899 (♂). EMERY, 1881, Ann. Mus. Civ. Genova, XVI, p. 270; 1892, Ann. Soc. Ent. France, LX, (1891), p. 563. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 95. ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 4 (♂). WASMANN, 1896, Notes Leyden Mus., XVIII, p. 76. H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 40. WASMANN, 1907, Deutsch. Ent. Zeitschr., p. 149. FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 81; 1907, Mitt. Naturh. Mus. Hamburg, XXIV, p. 15 (♂, ♀). F. C. WELLMAN, 1908, Ent. News, XIX, p. 230. FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, pp. 53, 59, and 65 (♂, ♀); 1910, *ibid.*, LIV, p. 441; 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 362 (♂, ♀, ♂); 1912, Mitt. Naturh. Mus. Hamburg, XXIX, p. 180; 1913, Rev. Zool. Afr., II, p. 328 (♂, ♀). BEQUAERT, *ibid.*, p. 426. FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 353 (♂, ♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 337 (♂, ♀). FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 240 (♂, ♀, ♂). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 76 (♂, ♀). REICHENSPERGER, 1915, Med. Göteborgs Mus. Zool. Afd., V, p. 20. WASMANN, 1920, Tijdschr. v. Ent., LXII, (1919), p. 128. ARNOLD, 1920, Ann. South African Mus., XIV, pp. 417 and 420 (♂, ♀, ♂), Pl. vi, fig. 67. J. HEWITT, 1920, South African Journ. Nat. Hist., II, p. 109.

*Pheidole talpa* GERSTÄCKER, 1871, Arch. f. Naturg., XXXVII, 1, p. 356 (♂); 1873, 'in v. d. Decken's Reisen in Ostafrika, Gliederthiere,' p. 360 (♂), Pl. xiv, fig. 11.

*Pheidole megacephala* var. *punctulata* WASMANN, 1898, Wien. Ent. Zeitg., XVII, p. 103; 1899, Notes Leyden Mus., XXI, p. 50. MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 14. REICHENSPERGER, 1915, 'Med. Göteborgs Mus. Zool. Afd., V, pp. 37, 38, 41, 46, and 53.

Type locality: Caffraria.

FRENCH GUINEA: Mamou (Silvestri). IVORY COAST: Assinie (C. Alluaud). FRENCH CONGO: Ogowe (Mocquerys). PORTUGUESE CONGO: Conde; Landana (Petit); Shiloango (Tschoffen). BELGIAN CONGO: Lower Congo (Solon); Kasai,

Kondué (Luja); Leopoldville; Elisabethville; Kasenga; Bukama; Lukonzolwa (J. Bequaert); Banana (Busschodts); Kinshasa (Waelbroeck); Banana to Boma (Tschöffen); Kisantu (Goossens); Mayombe (de Briey; Luja); Kiniati; Congo da Lemba (Luja); Boma; Zambi; Banana; Bolobo; Stanleyville; Ngayu; Avakubi; Niapu; Faradje; Garamba (Lang and Chapin); Tua (J. Maes). ANGOLA: St. Paul de Loanda (F. Silvestri). BENGUELA: (C. Wellman). MOSSAMÉDES: between the Cubango and Cuito Rivers (Baum and Van der Kellen). RHODESIA: Bulawayo (G. Arnold). TRANSVAAL: Pretoria. CAPE PROVINCE: Lower Albany; Grahamstown (Hewitt); Port Elizabeth (H. Brauns). NATAL: Durban (G. Arnold and L. Bevis). PORTUGUESE EAST AFRICA: Delagoa Bay (Liengme); Mozambique. ZANZIBAR: (Ville). GERMAN EAST AFRICA: Kibonoto, Mt. Kilimanjaro (Sjöstedt); Marangu, Mt. Kilimanjaro, 1800 m. (Alluaud and Jeannel); Amani (H. Prell); Mbaramu (v. d. Decken); Moschi (Zimmer). BRITISH EAST AFRICA: Chake Chake, Pemba Island (Voeltzkow); Nairobi, 1660 m. (Alluaud and Jeannel). UGANDA: Entebbe (Schultze). ABYSSINIA: Let Marefa, Schoa (Antinori). ERITREA: Ghinda (Belli).

26e1. Var. **atrox** (FOREL) EMERY, 1916, Rev. Zool. Afr., IV, pp. 236 and 241, figs. 7b and d (♂).

*Pheidole punctulata* subsp. *atrox* FOREL, 1913, *ibid.*, II, p. 328 (♂, ♀, ♀). BEQUAERT, *ibid.*, p. 426. FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 126 (♂, ♀, ♀). WASMANN, 1918, Tijdschr. v. Ent., LX, (1917), p. 395.

*Pheidole punctatissima* subsp. *atrox* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 22 (♂, ♀, ♀). TRÄGÅRDH, *ibid.*, p. 44. REICHENSBERGER, 1915, *ibid.*, V, p. 18.

*Pheidole punctulata* var. *atrox* ARNOLD, 1920, Ann. South African Mus., XIV, p. 424 (♂, ♀, ♀, ♂).

*Pheidole inquilina* ? FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 240 (mermithergate!). ARNOLD, 1920, Ann. South African Mus., XIV, 425 (recognizes its true nature as a mermithergate and found it in the nests of *P. megacephala punctulata* var. *atrox*).

Type locality: Elisabethville, BELGIAN CONGO (J. Bequaert).

BELGIAN CONGO: Bukama (J. Bequaert). RHODESIA: Bulawayo (G. Arnold). ZULULAND: Junction of the Umfolosi Rivers (I. Trägårdh). NATAL: Durban, Amanzimtoti (I. Trägårdh).

26e. Var. **speculifrons** (STITZ) EMERY, 1916, Rev. Zool. Afr., IV, pp. 236 and 242 (♂).

*Pheidole megacephala* var. *speculifrons* STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08),' III, p. 386 (♂, ♀) (*nec Pheidole speculifrons* Dalla Torre, 1893).

Type locality: Bukoba, Victoria Nyanza, GERMAN EAST AFRICA (Schubotz).

26f. Subsp. **rotundata** (FOREL) EMERY, 1916, Rev. Zool. Afr., VI, pp. 236 and 244 (♂, ♀).

*Pheidole rotundata* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 92 (♂, ♀). EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 34. FOREL, 1901, Mitth. Schweiz. Ent. Ges., X, p. 311; in Baum, 1903, 'Kunene-Sambesi Expedition,' p. 564; 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 239 (♂, ♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 337 (♂); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 76 (♂). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 417 and 425, fig. 21 (♂, ♀, ♂).

Type locality: DELAGOA (Liengme).

MOSSAMEDES: between the Cubango and Cuito Rivers (Baum and Van der Kellen). TRANSVAAL: Pretoria (E. Simon; F. Silvestri). NATAL: Durban (G. Arnold). RHODESIA: Livingstone; Chirinda Forest (G. Arnold). GERMAN EAST AFRICA: New Moschi, Mt. Kilimanjaro, 800 m. (Alluaud and Jeannel). BRITISH EAST AFRICA: Nairobi, Kikuyu (Alluaud).

27. ***Pheidole mentita*** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 338 (♂, ♀).

Type locality: Kindia, FRENCH GUINEA (F. Silvestri).

27<sub>1</sub>. Var. ***pullata*** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 339 (♂, ♀).

Type locality: Camayenne, FRENCH GUINEA (F. Silvestri).

28. ***Pheidole minima*** MAYR, 1900, Ent. Tidskr., XXI, p. 275 (♂, ♀).

Type locality: Mungo River, CAMEROON (R. Buchholz).

28<sub>1</sub>. Var. ***catella*** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 339 (♂, ♀).

Type locality: Olokemeji, SOUTHERN NIGERIA (F. Silvestri).

GOLD COAST: Aburi (F. Silvestri).

28a. Subsp. ***corticicola*** SANTSCHI, 1910, Ann. Soc. Ent. France, LXXXVIII, (1909), p. 366 (♂, ♀, ♀, ♂).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

FRENCH CONGO: Mindouli; Gomba (A. Weiss).

28b. Subsp. ***faurei*** SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 15 (♀, ♀).

Type locality: Samkita, FRENCH CONGO (F. Faure).

28c. Subsp. ***malelana*** Wm. M. WHEELER. See p. 133 (♂, ♀).

Type locality: Malela, BELGIAN CONGO (Lang and Chapin).

29. ***Pheidole mylognatha*** Wm. M. WHEELER. See p. 134 (♂, ♀).

Type locality: Banana, BELGIAN CONGO (Lang and Chapin).

30. ***Pheidole niapuana*** Wm. M. WHEELER. See p. 136 (♂, ♀).

Type locality: Niapu, BELGIAN CONGO (Lang and Chapin).

31. ***Pheidole nigeriensis*** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 340 (♂).

Type locality: Olokemeji, SOUTHERN NIGERIA (F. Silvestri).

32. ***Pheidole njassæ*** VIEHMEYER, 1914, Arch. f. Naturg., LXXIX, Abt. A, Heft 12, (1913), p. 35 (♂, ♀).

Type locality: Manow, Langenburg, GERMAN EAST AFRICA.

32<sub>1</sub>. Var. ***legitima*** (SANTSCHI).

*Pheidole njassæ* var. ***sculptior*** VIEHMEYER, 1914, Arch. f. Naturg., LXXIX, Abt. A, Heft 12, (1913), p. 36 (♂, ♀). (nec *P. flavens* var. *sculptior* Forel, 1893).

*Pheidole njassæ* var. ***legitima*** SANTSCHI, 1916, Bull. Soc. Ent. France, p. 242.

Type locality: Khutu Steppe, Morogoro, GERMAN EAST AFRICA (K. Schwartze).

33. ***Pheidole occipitalis*** ERN. ANDRÉ, 1890, Rev. d'Ent. Caen, IX, p. 321 (♂, ♀). DALLA TORRE, 1893, 'Cat. Hym.', VII, p. 93.

Type locality: SIERRA LEONE (Mocquerys).

33a. Subsp. ***neutralis*** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 336 (♂, ♀).

Type locality: Camayenne, FRENCH GUINEA (F. Silvestri).



34. **Pheidole ? pallidelutea** (LATREILLE) ROGER, 1863, 'Verzeich. Formicid.,' p. 30. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 94.

*Formica pallidelutea* LATREILLE, 1802, 'Hist. Nat. Fourmis,' p. 241 (♀). MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 418.

Type locality: Senegal.

35. **Pheidole philippi** EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 8 (2, ♀).

Type locality: Ghinda, ERITREA (F. Silvestri).

36. **Pheidole picata** (FOREL) EMERY, 1916, Rev. Zool. Afr., IV, p. 245, fig. 8b (2, ♀). See p. 1019.

*Pheidole punctulata* var. *picata* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 370.

FRENCH CONGO: Brazzaville (A. Weiss).

37. **Pheidole prelli** FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 362 (2, ♀, ♀, ♂).

Type locality: Mombasa, BRITISH EAST AFRICA (H. Prell).

37a. Subsp. **redbankensis** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 128 (2, ♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 418 and 434, fig. 22 (2, ♀).

Type locality: Bulawayo, RHODESIA (G. Arnold). This is the locality given by Forel; Arnold (1920) corrects it to Redbank, SOUTHERN RHODESIA.

37a. Var. **politociput** SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 503 (2, ♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 418 and 436 (2, ♀, ♀, ♂).

Type locality: Victoria Falls, RHODESIA (G. Arnold).

RHODESIA: Bulawayo (G. Arnold).

38. **Pheidole pulchella** SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 360 (♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

39. **Pheidole rugaticeps** EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 375 (2, ♀, ♀). MAGRETTI, 1884, Bull. Soc. Ent. Italiana, XV, (1883), p. 245 (♀); 1884, Ann. Mus. Civ. Genova, XXI, p. 542 (♀). EMERY, 1892, *ibid.*, XXXII, p. 112 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 96. FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 253 (2, ♀, ♀). EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 3 (2, ♀).

Type locality: Sciotel, ERITREA (Beccari).

ERITREA: Ghinda (K. Escherich; F. Silvestri). SOMALILAND: Obbia (Bricchetti-Robecchi); Sinadogo; Erdal (Pavesi). ANGLO-EGYPTIAN SUDAN: El Hefera, Settiti (Magretti). ARABIA: Yemen.

39a. Subsp. **arabs** (EMERY) FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 253 (2). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 336.

*Pheidole rugaticeps* var. *arabs* EMERY, 1881, Ann. Mus. Civ. Genova, XVI, p. 535 (2, ♀, ♀).

Type locality: Tes, southern ARABIA (Doria and Beccari).

ERITREA: Ghinda (K. Escherich). SENEGAMBIA: Dakar; Thiès (F. Silvestri).

40. **Pheidole saxicola** WM. M. WHEELER. See p. 138 (2, ♀).

Type locality: Zambi, BELGIAN CONGO (Lang, Chapin and Bequaert).

BELGIAN CONGO: Boma (J. Bequaert).

41. *Pheidole scabriuscula* GERSTÄCKER, 1871, Arch. f. Naturg., XXXVII, I, p. 356 (♀); 1873, in 'v. d. Decken's Reisen in Ostafrika, Gliederthiere,' p. 360 (♀).  
 c DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 96. H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 40.

Type locality: Ndara, BRITISH EAST AFRICA (v. d. Decken).

42. *Pheidole schoutedeni* FOREL, 1913, Rev. Zool. Afr., II, p. 329 (2, ♀).  
 BEQUAERT, *ibid.*, p. 427.

Type locality: Welgelegen, BELGIAN CONGO (J. Bequaert).

- 42a. Var. *platycephala* (STITZ) ARNOLD, 1920, Ann. South African Mus., XIV, p. 450.

*Pheidole platycephala* STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp., 1910-11,' I, p. 380, fig. 3 (2, ♀).

Type locality: Libenge, BELGIAN CONGO (Schubotz).

43. *Pheidole schultzei* FOREL, in Schultze, 1910, 'Forschungsreise in Süd-afrika,' IV, p. 9, fig. 1 (2, ♀, ♀, ♂). ARNOLD, 1920, Ann. South African Mus., XIV, p. 457 (2, ♀, ♀, ♂).

*Pheidole schultzei* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 436 (2, ♀).

Type locality: Between Kooa and Sekgoma; BECHUANALAND (L. Schultze).

BECHUANALAND: Between Kgokong and Kang (L. Schultze). RHODESIA: Victoria Falls (R. C. Wroughton).

- 43a. Var. *gwaaiensis* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 129 (2, ♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 419 and 458, fig. 28 (2, ♀, ♀, ♂).

Type locality: Gwaai, RHODESIA (G. Arnold).

44. *Pheidole sculpturata* MAYR, 1866, Verh. Zool. Bot. Ges. Wien, XVI, p. 897 (2).. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 96. EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 31 (2, ♀); 1900, Bull. Soc. Ent. Italiana, XXXII, p. 114, fig. 8 (2). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXXVIII, (1909), p. 361 (2, ♀). FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 9 (2); 1910, Ann. Soc. Ent. Belgique, LIV, p. 436 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 419 and 461, fig. 29 (2, ♀).

Type locality: Caffraria.

FRENCH CONGO: Gomba; Mandouga; Mbamu (A. Weiss). GERMAN SOUTH-WEST AFRICA: (Lübbert); Okahandja (Casper). TRANSVAAL: Pretoria (E. Simon; Lounsbury). ORANGE FREE STATE: Bloemfontein (E. Simon); Bothaville (H. Brauns). NATAL: (R. C. Wroughton; Haviland).

- 44a. Var. *areolata* FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 269 (2, ♀).  
 ARNOLD, 1920, Ann. South African Mus., XIV, p. 463 (2, ♀).

Type locality: Bothaville, ORANGE FREE STATE (H. Brauns).

- 44a. Subsp. *berthoudi* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 89 (2, ♀); 1910, Ann. Soc. Ent. Belgique, LIII, p. 65 (♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXXVIII, (1909), p. 361 (2, ♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 463 (2, ♀).

Type locality: Valdezia, TRANSVAAL (P. Berthoud).

FRENCH CONGO: Gomba; Mandouga; Mbamu (A. Weiss). BENGUELA: (Wellman).

- 44b. Subsp. *dignata* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 250 (2, ♀).

Type locality: Gomba, FRENCH CONGO (A. Weiss).

FRENCH CONGO: Mandouga (A. Weiss).

44c. Subsp. **katonæ** FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 21 (♂).

Type locality: Boma Gombe, GERMAN EAST AFRICA (Katona).

44d. Subsp. **welgelegenensis** FOREL, 1913, Rev. Zool. Afr., II, p. 327 (2,

♀). BEQUAERT, *ibid.*, p. 426. FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 354 (♀).

Type locality: Welgelegen, BELGIAN CONGO (J. Bequaert).

BELGIAN CONGO: Nieuwdorp (Leplae).

44e. Subsp. **zambesiana** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 133 (2, ♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 464 (2, ♀).

Type locality: Victoria Falls, RHODESIA (G. Arnold).

RHODESIA: Shiloh (G. Arnold).

45. **Pheidole sinaitica** MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 745 (2); 1863, *ibid.*, XIII, p. 441. ROGER, 1863, 'Verzeich. Formicid.,' p. 31. MAYR, 1878, Verh. Zool. Bot. Ges. Wien, XXVIII, p. 675 (2). ERN. ANDRÉ, 1881, Ann. Soc. Ent. France, (6) I, p. 73; 1883, 'Spec. Hym. Europ. Algérie,' II, pp. 383 and 384 (2, ♀). MAGRETTI, 1884, Ann. Mus. Civ. Genova, XXI, p. 542 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 96. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 94. MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicidæ,' p. 6 (2, ♀). FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 253 (2, ♀). EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 3 (2, ♀); 1916, Rev. Zool. Afric., IV, p. 234, figs. 4d and e. *Pheidole sinaitica* MAGRETTI, 1884, Bull. Soc. Ent. Italiana, XV, (1883), p. 245 (♀).

Type locality: Sinai Peninsula (v. Frauenfeld).

ERITREA: Ghinda (K. Escherich); Nefasit (K. Escherich; F. Silvestri). SOUTHERN ABYSSINIA: (Ilg). ANGLO-EGYPTIAN SUDAN: Atbara River; Sebderat (Magretti).

46. **Pheidole speculifera** EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 373 (2, ♀). MAGRETTI, 1884, Bull. Soc. Ent. Italiana, XV, (1883), p. 245 (♀); 1884, Ann. Mus. Civ. Genova, XXI, p. 542 (♀). EMERY, 1895, *ibid.*, XXV, p. 178 (2). FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 253 (2, ♀); 1913, Rev. Suisse Zool., XXI, p. 668 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 77 (♀). See p. 140.

*Pheidole speculifrons* DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 96.

Type locality: Anseba, ERITREA (Beccari).

BELGIAN CONGO: Faradje; Garamba (Lang and Chapin). CAMEROON: Johann-Albrechtshöhe (Conradt). BRITISH EAST AFRICA: Mt. Kenia, Amboni River, 1800 m. (Alluaud and Jeannel). ABYSSINIA: Arussi Galla, Ganale Gudda (V. Bottego). ERITREA: Ghinda; Melelia (K. Escherich). ANGLO-EGYPTIAN SUDAN: Bahr-el-Salaam (Magretti).

46i. Var. **ascarus** EMERY, 1901, Bull. Soc. Ent. Italiana, XXXIII, p. 62 (2). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 77 (2, ♀). Type locality: Ghinda, ERITREA (Belli).

BRITISH EAST AFRICA: Nairobi, 1600 m. (Alluaud and Jeannel).

46j. Var. **cubangensis** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 413 (2).

*Pheidole crassinoda* var. *cubangensis* FOREL, 1901, Mitth. Schweiz. Ent. Ges., X, p. 306 (2).

*Pheidole crassinoda* var. *kubangensis* FOREL, in Baum, 1903, 'Kunene-Sambesi Expedition,' p. 561 (♂).

Type locality: between the Cubango and Cuito Rivers, MOSSAMEDES (Baum and Van der Kellen).

BELGIAN CONGO: near Lisala, above Nouvelle Anvers (Kohl).

47. *Pheidole spinulosa* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 438 (♂, ♀, ♀, ♂). EMERY, 1916, Rev. Zool. Afr., IV, p. 250 (♂). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 419 and 453 (♂, ♀, ♀, ♂).

Type locality: BASUTOLAND (R. C. Wroughton).

47a. Subsp. *conigera* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 440 (♂).

Type locality: South Africa (Wood Mason).

47b. Subsp. *messalina* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 440 (♂, ♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 454 (♂, ♀).

Type locality: BASUTOLAND (R. C. Wroughton).

47b<sub>1</sub>. Var. *nexa* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 129 (♂, ♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 455, fig. 27 (♂, ♀, ♀), Pl. vi, fig. 70.

Type locality: RHODESIA (G. Arnold).

RHODESIA: Bulawayo; Plumtree (G. Arnold).

47b<sub>2</sub>. Var. *poweri* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 241 (♂, ♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 457 (♂, ♀).

Type locality: Kimberley, CAPE PROVINCE (Power).

48. *Pheidole squalida* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 364 (♂, ♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

49. *Pheidole strator* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 256 (♂, ♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 76 (♂, ♀). ALLUAUD and JEANNEL, 1914, Arch. Zool. Gén. Exp., LIII, p. 366.

Type locality: Ghinda, ERITREA (K. Escherich).

BRITISH EAST AFRICA: Shimoni; Blue Post Hotel, Kikuyu, 1520 m. (Alluaud and Jeannel).

49a. Subsp. *fugax* ARNOLD, 1920, Ann. South African Mus., XIV, pp. 418 and 449, fig. 25a (♂, ♀).

Type locality: Amatongas Forest, PORTUGUESE EAST AFRICA (G. Arnold).

50. *Pheidole teneriffana* FOREL, 1893, Ann. Soc. Ent. Belgique, XXXVII, p. 465 (♂, ♀). EMERY, 1916, Rev. Zool. Afr., IV, p. 250. SANTSCHI, 1920, Ann. Soc. Ent. France, LXXXVIII, (1919), p. 378.

*Pheidole teneriffana* EMERY, 1901, Bull. Soc. Ent. Italiana, XXXIII, p. 61 (♂).

Type locality: Laguna, Teneriffe, CANARY ISLANDS (Medina).

BRITISH EAST AFRICA: Mombasa (G. Arnold). ERITREA: Massaua (Belli).

51. *Pheidole tenuinodis* MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 10 (♂, ♀). FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 12 (♂, ♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 127 (♂, ♀); 1913, Deutsch. Ent. Zeitschr., Beih., p. 215 (♂, ♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 337 (♂, ♀); 1914, Méd. Göteborgs Mus. Zool. Afd., III, p. 22 (♀). EMERY, 1916, Rev. Zool. Afr., IV, p. 245. ARNOLD, 1920, Ann. South African Mus., XIV, pp. 417 and 428 (♂, ♀, ♀).

Type locality: Bothaville, ORANGE FREE STATE (H. Brauns).

CAPE PROVINCE: Ladismith (H. Brauns); Kirstenbosch near the Cape (F. Silvestri). NATAL: Pinetown (I. Trägårdh). RHODESIA: Matoppo Hills (G. Arnold). GERMAN SOUTHWEST AFRICA: Okahandja (Casper); Grootfontein (von Erffer); Rooibank (L. Schultze). BECHUANALAND: Between Kooa and Thopane (L. Schultze).

51. Var. *sipapomæ* ARNOLD, 1920, Ann. South African Mus., XIV, pp. 417 and 430 (2, ♀).

Type locality: Sipapoma, Umgusa River, SOUTHERN RHODESIA (G. Arnold).

SOUTHERN RHODESIA: Victoria Falls (G. Arnold).

51a. Subsp. *bothæ* (FOREL) SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 22 (2, ♀, ♀).

*Pheidole foreli* subsp. *bothæ* FOREL, 1901, Mitt. Naturh. Mus. Hamburg, XVIII, p. 62 (2, ♀).

Type locality: Bothaville, ORANGE FREE STATE (H. Brauns).

NATAL: Van Reenen; Balgowan (F. Silvestri).

52. *Pheidole termitophila* FOREL, in Wasmann, 1904, 'Termitophilen aus dem Sudan, Res. Swed. Zool. Exped. Jägerskiöld,' XIII, p. 13 (2, ♀, ♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 339 (2).

Type locality: Kaka on the Ghrab el Aish, White Nile, ANGLO-EGYPTIAN SUDAN (I. Trägårdh).

SENEGAMBIA: Dakar (F. Silvestri).

52a. Subsp. *liberiensis* FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 270 (2, ♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 339 (2, ♀).

Type locality: Golah, LIBERIA.

FRENCH GUINEA: Mamou; Kakoulima (F. Silvestri).

53. *Pheidole tricarinata* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 340 (2).

Type locality: Camayenne, FRENCH GUINEA (F. Silvestri).

54. *Pheidole vanderveldi* FOREL, 1913, Rev. Zool. Afr., II, p. 326 (2, ♀). BEQUAERT, *ibid.*, p. 426. SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 23 (2, ♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 481 (2, ♀).

Type locality: Sankisia, BELGIAN CONGO (J. Bequaert).

NATAL: Durban (I. Trägårdh).

55. *Pheidole ? variolosa* EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 113 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 97.

Type locality: Mogadiscio, SOMALILAND (Bricchetti-Robecchi).

SOMALILAND: Obbia (Pavesi).

56. *Pheidole victoris* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 127 (2, ♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 417 and 430 (2, ♀).

Type locality: Malindi, SOUTHERN RHODESIA (G. Arnold).

57. *Pheidole xocensis* FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 213 (2, ♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 419 and 443, fig. 24 (2, ♀), Pl. vi, fig. 68.

Type locality: Xoce River, SOUTHERN RHODESIA (G. Arnold).

57a. Var. *bulawayensis* FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 215 (2, ♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 445 (2, ♀).

Type locality: Bulawayo, SOUTHERN RHODESIA (G. Arnold).

**Melissotarsini Emery****Melissotarsus EMERY**

*Melissotarsus* EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 378.

Genotype: *Melissotarsus beccarii* Emery, 1877.

1. **Melissotarsus beccarii** EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 379, fig. (2, ♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 74. FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 243 (♀, ♀, ♂). ARNOLD, 1916, Ann. South African Mus., XIV, p. 188 (♀, ♀, ♂), Pl. v, figs. 51, 51a, 51b.

Type locality: Keren, ERITREA (Beccari).

NATAL: Durban (Marley; C. B. Cooper).

2. **Melissotarsus emeryi** FOREL, 1907, Rev. d'Ent. Caen, XXVI, p. 133 (2).

Type locality: near the Colba River, ABYSSINIA (de Rothschild).

- 2a. Var. **pilipes** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 71 (♀); 1914, Boil. Lab. Zool. Gen. Agrar. Portici, VIII, p. 342 (♀).

Type locality: Taveta, BRITISH EAST AFRICA (Alluaud and Jeannel).

SENEGAMBIA: Thiès (F. Silvestri). GERMAN EAST AFRICA: Bismarckhügel, Mt. Kilimanjaro (Alluaud and Jeannel).

3. **Melissotarsus major** SANTSCHI, 1919, Rev. Zool. Afr., VII, p. 85 (♀).

Type locality: Penge, BELGIAN CONGO (J. Bequaert).

4. **Melissotarsus weissii** SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 356, fig. 3 (♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

**Myrmicariini Emery****Myrmicaria W. SAUNDERS**

*Myrmicaria* W. SAUNDERS, 1841, Trans. Ent. Soc. London, III, p. 57.

*Physatta* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 171.

*Heptacondylus* F. SMITH, *ibid.*, p. 141.

Genotype: *Myrmicaria brunnea* W. Saunders, 1841.

1. **Myrmicaria baumi** FOREL, 1901, Mitth. Schweiz. Ent. Ges., X, p. 307 (♀); in Baum, 1903, 'Kunene-Sambesi Expedition,' p. 562 (♀); in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 5 (♀, ♂). STITZ, 1911, Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08), III, p. 383, fig. 5 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 266 (♀).

Type locality: between the Cubango and Cuito Rivers, MOSSAMEDES (Baum and Van der Kellen).

GERMAN SOUTHWEST AFRICA: (Lübbert). BECHUANALAND: Kooa; Severelela to Khakhea (L. Schultze).

2. **Myrmicaria eumenoides** (GERSTÄCKER) MAYR, 1866, Verh. Zool. Bot. Ges. Wien, XVI, p. 905 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 155. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 83. MAYR, 1896, Ent. Tidskr., XVII, p. 249. FOREL, 1897, Abhandl. Senckenberg. Naturf. Ges., XXI, p. 188 (♀). H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 42. BINGHAM, 1903, Ann. Mag. Nat. Hist., (7) XII, p. 62 (♀). SJÖSTEDT, 1904, 'I Västafrikas Urskogar,' p. 507. WASMANN, 1907, Deutsch. Ent. Zeitschr., p. 151. MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 17. FOREL, 1910, Ann. Soc. Ent. Belgique, LIV,

p. 446 (♀); in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 5 (♀). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 133 (♀, ♀, ♂). WASMANN, 1911, Tijdschr. v. Ent., LIV, p. 201. STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08),' III, p. 385, fig. 5 (♀, ♀, ♂). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 354 (♀, ♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 116 (♀); 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 34 (♀, ♀). TRÄGÅRDH, *ibid.*, p. 45. ARNOLD, 1914, Proc. Rhodesia Sc. Assoc., XIII, p. 25. H. BRAUNS, *ibid.*, pp. 34, 36, 38, and 39. FOREL, 1916, Rev. Suisse Zool., XXIV, p. 404 (♀, ♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 263 (♀, ♀, ♂), Pl. VII, figs. 87, 87a, 89a, and 89b. WASMANN, 1918, Tijdschr. v. Ent., LX, (1917) p. 394.

*Heptacondylus eumenoides* GERSTÄCKER, 1858, Monatsb. Ak. Wiss. Berlin, p. 263 (♀); in Peters, 1862, 'Reise n. Mossambique, Zool.,' V, p. 514 (♀). MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 423. ROGER, 1863, 'Verzeich. Formicid.,' p. 28. GERSTÄCKER, 1871, Arch. f. Naturg., XXXVII, 1, p. 356; 1873, in 'v. d. Decken's Reisen in Ost Afrika, Gliederthiere,' p. 358 (♀). RADOSZKOWSKY, 1881, Journ. Sci. Ac. Lisboa, VIII, No. 31, p. 198.

*Physatta natalensis* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 172 (♀).

*Heptacondylus sulcatus* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 756 (♀); 1863, *ibid.*, XIII, p. 423. ROGER, 1863, 'Verzeich. Formicid.,' p. 28.

*Heptacondylus natalensis* MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 423. ROGER, 1863, 'Verzeich. Formicid.,' p. 27.

*Myrmecaria fodiens* subsp. *eumenoides* EMERY, 1893, Rev. Suisse Zool., I, p. 219; 1895, Ann. Soc. Ent. France, LXIV, p. 42.

*Myrmecaria fodiens* var. *eumenoides* ZAVATTARI, 1909, 'Il Ruwenzori, Parte Scientif.,' I, p. 214 (♀).

Type locality: Tete, PORTUGUESE EAST AFRICA (Peters).

CAMEROON: Bibundi (Tessmann). SPANISH GUINEA: Alen (Tessmann). BELGIAN CONGO: Congo da Lemba (Luja); Romée near Stanleyville (Kohl); Kasindi; primary forest W. of Mt. Ruwenzori; Ituri; Aruwini; Kwidjwi Island (Schubotz). SOUTHERN RHODESIA: (G. Arnold). ANGOLA: (Welwitsch). GERMAN SOUTHWEST AFRICA: (Lübbert). BECHUANALAND: Lehututu to Kang; Kooa (L. Schultze). BASUTOLAND. TRANSVAAL: Barberton (Rendall); Valdezia (P. Berthoud); Makapan; Pretoria; Hamman's Kraal (E. Simon). NATAL: Stamford Hill; Amanzimtoti (I. Trägårdh); Durban (G. Arnold). DELAGOA: (Liengme; A. Müller). GERMAN EAST AFRICA: Mombo, Usambara (Sjöstedt); Bondei (C. W. Schmidt). BRITISH EAST AFRICA: Mombasa (v. d. Decken). UGANDA: Ibanda; Mitiana; Butiti; Nakitawa (Duke of Abruzzi). ZANZIBAR: (A. Voeltzkow).

2a. Var. *fusca* STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08),' III, p. 385 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 116 (♀).

Type locality: Boga, north of Mt. Ruwenzori, BELGIAN CONGO (Schubotz).

2a. Subsp. *occidentalis* SANTSCHI, 1920, 'Études Maladies Parasites Cacaoyer S. Thomé,' X, p. 3, footnote (♀).

Type locality: Dimbroko, IVORY COAST (Le Mout).

2b. Subsp. *opaciventris* (EMERY) FOREL, 1911, Rev. Zool. Afr., I, p. 276; 1913, Ann. Soc. Ent. Belgique, LVII, p. 354 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 116 (♀). See p. 143.

*Myrmicaria opaciventris* EMERY, 1893, Rev. Suisse Zool., I, p. 221 (♂, ♀, ♂).  
ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 4 (♂, ♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 391 (♂, ♀, ♂). FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 54 (♀); 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 263 (♀). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 133 (♀).

*Myrmicaria eumenoides* var. *opaciventris* STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 393 (♀, ♀).

Type locality: BENGUELA (Buchner).

SIERRA LEONE: Samlia Falls, River N'Gamie (Mocquers). CAMEROON: Mundame (Conradt); Yaunde (Zenker). FRENCH CONGO: Ogowe (Mocquers); Brazzaville; Madingu (A. Weiss). BELGIAN CONGO: Leopoldville (Dubois); Duma; Libenge (Schubotz); Kimuenza (Schultze); Kimpoko (Büttner); Dungu to Niangara, village of Denge (Hutereau); Malela; Thysville; Stanleyville; Avakubi; Medje; Akenge; Bafwabaka; Ngayu; Faradje (Lang and Chapin); Walikale to Lubutu (J. Bequaert); Yakuluku (J. Rodhain). UGANDA: (Benoit). WEST ABYSSINIA: (Ilg).

2b<sub>1</sub>. Var. *congolensis* (FOREL). See p. 146.

*Myrmicaria eumenoides* subsp. *congolensis* FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 59 (♀); 1910, *ibid.*, LIV, p. 421; 1911, Rev. Zool. Afr., I, p. 276 (♀, ♀); 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 362 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 354 (♂, ♂); 1913, Rev. Zool. Afr., II, p. 337; 1916, Rev. Suisse Zool., XXIV, p. 404. WASMANN, 1918, Ent. Mitt. Deutsch. Ent. Mus. Berlin, VII, p. 135; 1918, Tijdschr. v. Ent., LXI, p. 80.

*Myrmicaria eumenoides* subsp. *congolensis* J. BEQUAERT, 1913, Rev. Zool. Afr., II, p. 429. SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 342 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' pp. 115 and 116 (♀, ♀).

Type locality: Lower CONGO (in stomach of *Mantis temmincki*; Solon).

CAMEROON: Victoria (F. Silvestri); Soppo (v. Rothkirch). BELGIAN CONGO: Kondué (Luja); Welgelegen; Kisantu (J. Bequaert); Lukula (Daniel); Mafungu; Congo da Lemba; Kিনিати; Banza Masola (R. Mayné); Mayombe (de Briey). GERMAN EAST AFRICA: Amani (Zimmer); Kigali, near Issawe (Zimmer). UGANDA: Chacansengula to Kasengui (Bayer); Buzubizi; Unyoro Province, Region of Mubende, Lake Albert; Mt. Ruwenzori, Ibanda, 1400 m. (Alluaud). BRITISH EAST AFRICA: Mombasa (H. Prell).

2b<sub>2</sub>. Var. *consanguinea* (SANTSCHI).

*Myrmicaria eumenoides* subsp. *congolensis* var. *consanguinea* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' pp. 115, 116 (♀, ♀).

Type locality: Likoni, BRITISH EAST AFRICA (Alluaud and Jeannel).

BRITISH EAST AFRICA: Tiwi; Gazi; River Ramisi; Blue Post Hotel, Kikuyu (Alluaud and Jeannel).

2b<sub>3</sub>. Var. *crucheti* (SANTSCHI). See p. 146.

*Myrmicaria eumenoides* subsp. *congolensis* var. *crucheti* SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 311 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 116 (♀).

Type locality: Cucala, BENGUELA (J. Cruchet).

GERMAN EAST AFRICA. BELGIAN CONGO: Leopoldville; Stanleyville; Avakubi; Ngayu (Lang and Chapin). CAMEROON: Metit (Schwab).



3. *Myrmicaria exigua* ERN. ANDRÉ, 1890, Rev. d'Ent. Caen, IX, p. 320 (♀, ♂). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 155. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 134. FOREL, 1916, Rev. Suisse Zool., XXIV, p. 404.

Type locality: SIERRA LEONE (Mocquerys).

CAMEROON: (H. Brauns). BELGIAN CONGO: (Kohl). FRENCH CONGO: Gaboon.

31. Var. *gracilis* (STITZ) SANTSCHI, 1920, Rev. Zool. Afr., VIII, p. 120.

*Myrmicaria gracilis* STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 133 (♀). FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 445 (♀).

Type locality: Bibundi, CAMEROON (Tessmann).

CAMEROON: (L. v. Muralt).

32. Var. *obscura* SANTSCHI, 1920, Rev. Zool. Afr., VIII, p. 120 (♀).

Type locality: Luali, BELGIAN CONGO (J. Bequaert).

33. Var. *pulla* SANTSCHI, 1920, Rev. Zool. Afr., VIII, p. 119 (♀).

Type locality: Yambuya, BELGIAN CONGO (J. Bequaert).

34. Var. *rufiventris* FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 345 (♀); 1916, Rev. Suisse Zool., XXIV, p. 404 (♀).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

BELGIAN CONGO: Lumaliza; Makanga; Batiamponde (Kohl).

- 3d. Subsp. *kisangani* WM. M. WHEELER. See p. 148 (♀).

Type locality: Stanleyville, BELGIAN CONGO (Lang and Chapin).

4. *Myrmicaria lævior* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 445 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 267 (♀).

Type locality: NATAL (Haviland).

5. *Myrmicaria nigerrima* ARNOLD, 1916, Ann. South African Mus., XIV, p. 270 (♀), Pl. VII, fig. 92.

Type locality: Matoppo Hills, SOUTHERN RHODESIA (G. Arnold).

6. *Myrmicaria nigra* (MAYR) DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 155. EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 42. FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 446 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 269 (♀, ♂), Pl. VII, fig. 91.

*Heptacondylus niger* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 755 (♀); 1863, ibid., XIII, p. 423. ROGER, 1863, 'Verzeich. Formicid.,' p. 27. MAYR, 1865, 'Reise Novara, Zool.,' II, Formicidæ, p. 110 (♀).

Type locality: Cape of Good Hope (Novara Exped.).

CAPE PROVINCE: Cape Town (E. Simon); Montagu Pass (H. Brauns). NATAL: at 5500 ft. (R. C. Wroughton).

7. *Myrmicaria nitida* STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 133 (♀).

Type locality: Duala, CAMEROON (Schäfer).

SPANISH GUINEA: Nkolentanga (Tessmann).

According to Forel, 1910, Ann. Soc. Ent. Belgique, LIV, p. 421, this cannot be separated from *M. eumenoides* subsp. *opaciventris* var. *congolensis* (Forel).

71. Var. *fumata* SANTSCHI, 1916, Bull. Soc. Ent. France, p. 242.

*Myrmicaria nitida* var. *brunnea* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 254 (♀) (*nec Myrmicaria brunnea* Saunders).

Type locality: Near Dimbroko, IVORY COAST (Posth).

8. *Myrmicaria salambo* WM. M. WHEELER. See p. 147 (♀).

Type locality: Garamba, BELGIAN CONGO (Lang and Chapin).

9. *Myrmicaria striata* STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08),' III, p. 382, fig. 5 (♀). FOREL, 1913, Rev. Zool. Afr., II, p. 337 (♀). BEQUAERT, *ibid.*, p. 429. FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 212 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 267 (♀, ♀, ♂), Pl. VII, figs. 90a, b, c.

*Myrmicaria striatula* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 116 (♀).

Type locality: Bukoba, Victoria Nyanza, GERMAN EAST AFRICA (Schubotz).

BELGIAN CONGO: Elisabethville (J. Bequaert). SOUTHERN RHODESIA: Bembesi; Plumtree; Bulawayo (G. Arnold). GERMAN EAST AFRICA: Kibosho, Mt. Kilimanjaro (C. Alluaud).

9i. Var. *verticalis* SANTSCHI, 1920, 'Études Maladies Parasites Cacaoyer S. Thomé,' p. 3, footnote (♀).

Type locality: Bulawayo, RHODESIA (G. Arnold).

9a. Subsp. *buttgenbachi* FOREL, 1913, Rev. Zool. Afr., II, p. 337 (♀).

Type locality: not given; probably Katanga Region, BELGIAN CONGO (Buttgenbach).

9b. Subsp. *insularis* SANTSCHI, 1920, 'Études Maladies Parasites Cacaoyer S. Thomé,' p. 2 (♀, ? ♂).

Type locality: SAN THOMÉ (de Seabra).

10. *Myrmicaria tigreënsis* (GUÉRIN) F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 141. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 436. ROGER, 1863, 'Verzeich. Formicid.,' pp. 28 and 48. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 156.

*Myrmica tigreënsis* GUÉRIN, in Lefebvre, 1848, 'Voy. Abyssinie,' IV, Zool., pt. 6, p. 351 (♂), Pl. VII, fig. 7.

Type locality: ABYSSINIA.

### Cardiocondyliini Emery

#### Cardiocondyla EMERY

*Cardiocondyla* EMERY, 1869, Ann. Accad. Natural. Napoli, (2) II, p. 20.

*Emeryia* FOREL, 1890, Ann. Soc. Ent. Belgique, XXXIV, C. R., p. cx (♂).

Genotype: *Cardiocondyla elegans* Emery, 1869.

1. *Cardiocondyla emeryi* FOREL, 1881, Mitth. München. Ent. Ver., V, p. 5 (♀). ERN. ANDRÉ, 1881, Ann. Soc. Ent. France, (6) I, p. 69 (♀), Pl. III, figs. 10, 11; 1883, 'Spec. Hym. Europ. Algérie,' II, pp. 328 and 329 (♀, ♂), Pl. XXI, figs. 9-12, and 14-15. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 71. FOREL, 1904, Ann. Soc. Ent. Belgique, XLVIII, p. 422 (♀, ♀, ♂); 1907, Ann. Mus. Nat. Hungarici, V, p. 17 (♂); 1913, Ann. Soc. Ent. Belgique, LVII, pp. 138 and 351 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 200 (♀, ♀, ♂), Pl. V, figs. 57, 57a. See pp. 150 and 1021.

Type locality: St. Thomas, WEST INDIES.

Tropicopolitan. MADEIRA: (E. Schmitz). BELGIAN CONGO: Congo da Lemba (R. Mayné); Thysville (J. Bequaert). RHODESIA: Bulawayo (G. Arnold). GERMAN EAST AFRICA: Arusha-chini (Katona). NATAL: Durban (C. B. Cooper).

1a. Subsp. *mahdii* KARAWAIEW, 1911, Rev. Russe Ent., XI, p. 8 (♀).

Type locality: Khartum, ANGLO-EGYPTIAN SUDAN (Karawaiew).

## Crematogastrini Emery

Crematogaster LUND<sup>1</sup>

*Crematogaster* LUND, 1831, Ann. Sc. Nat., XXIII, p. 132. MAYR, 1855, Verh. Zool. Bot. Ges. Wien, V, p. 468.

*Acrocalia* MAYR, 1852, Verh. Zool. Bot. Ges. Wien, II, p. 147.

*Formica* (part) FABRICIUS, OLIVIER. *Atta* (part) BUCKLEY. *Cremastogaster* MAYR, FOREL, SANTSCHI, etc. *Monomorium* (part) BUCKLEY.

Genotype: *Formica scutellaris* Olivier, 1791.

Subgenus 1. *Crematogaster* LUND, *sensu stricto*

Subgenotype: same as genotype.

1. *Crematogaster ægyptiaca* (MAYR). See p. 1022.

*Cremastogaster ægyptiaca* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 765 (♀); 1863, *ibid.*, XIII, p. 404. ROGER, 1863, 'Verzeich. Formicid.,' p. 36. EMERY, 1881, Ann. Mus. Civ. Genova, XVI, p. 535. ERN. ANDRÉ, 1883, 'Spec. Hym. Europ. Algérie,' II, p. 392 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 79. EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 10.

Type locality: EGYPT.

SOUTHERN ARABIA: Aden. ERITREA: Assab (Doria and Beccari).

1a. Subsp. *senegalensis* (RÔGER) SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 344. See p. 1022.

*Cremastogaster senegalensis* RÔGER, 1863, Berlin. Ent. Zeitschr., VII, p. 206 (♀, ♀); 1863, 'Verzeich. Formicid.,' p. 36. EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 379 (♀). MAGRETTI, 1884, Bull. Soc. Ent. Italiana, XV, (1883), p. 245; 1884, Ann. Mus. Civ. Genova, XXI, p. 343 (♀, ♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 86. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 144; in Jägerskiöld, 1903, 'Exped., IX, Formicid.,' p. 7.

Type locality: Senegal (Sichel).

GOLD COAST. ANGLO-EGYPTIAN SUDAN: Suakin; Metemma; Sebderat; Ain (Magretti); Ondurman (I. Trägårdh). ERITREA: Bogos; Keren (Beccari).

1a<sub>1</sub>. Var. *devincta* (SANTSCHI).

*Cremastogaster ægyptiaca* subsp. *senegalensis* var. *devincta* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 343 (♀).

Type locality: Konakry, FRENCH CONGO (F. Silvestri).

1a<sub>2</sub>. Var. *robusta* EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 10 (♀, ♀, ♂).

<sup>1</sup>*Crematogaster nitidus* "Smith," recorded from Angola (Welwitsch) by Radoszkowsky, 1881, Journ. Sci. Ac., Lisboa, VIII, No. 31, p. 197, has apparently never been described.

*Cremastogaster ancipithula*? Forel, 1917, Bull. Soc. Vaudoise Sc. Nat., (5) LI, p. 252 (♀), was originally described as the ♀ of *C. wellmani* Forel. It has not been included in the Catalogue, since it is probably the ♀ of another form.

*Crematogaster scutellaris* (Olivier) subspecies *schmidti* (Mayr) (*Acrocalia schmidti* Mayr, 1852, Verh. Zool. Bot. Ges. Wien, II, p. 149, ♀, ♀; type locality: Wipbach, Carniola) is, according to Emery (1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 10), introduced in some of the harbors of the Red Sea: Port Sudan (*Cremastogaster ægyptiaca* Karawalew, 1911, Rev. Russe Ent., XI, p. 8, ♀); Massaua (*C. castanea* Emery, 1877, Ann. Mus. Civ. Genova, IX, p. 379, ♀; 1881, *ibid.*, XVI, p. 535).

Sjöstedt (1908, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 116) mentions *Cremastogaster admota* "Mayr in litt." as occurring in swollen thorns of *Acacia drepanolobium*, near Kahe, Usambara. I have not found the description of a form bearing that name.

*Crematogaster robusta* EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 379 (♀, ♂).  
DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 85.

*Crematogaster ægyptiaca* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 257 (♀, ♂) (*nec* Mayr).

Type locality: Keren, ERITREA (Beccari).

ERITREA: Nefasit (K. Escherich; F. Silvestri).

2. *Crematogaster alulai* EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 11.

*Crematogaster menileki* var. *alulai* EMERY, 1901, Bull. Soc. Ent. Italiana, XXXIII, p. 61 (♀).

*Crematogaster menileki* var. *alulai* SANTSCHI, 1912, Bull. Soc. Ent. France, p. 412 (♀).

*Crematogaster menileki* var. *alulai* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 93 (♀).

Type locality: Ghinda, ERITREA (Belli).

BRITISH EAST AFRICA: Shimoni (Alluaud and Jeannel).

2a. Subsp. *scrutans* (FOREL) EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 11 (♀).

*Crematogaster scrutans* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 258 (♀).  
ARNOLD, 1920, Ann. South African Mus., XIV, p. 518 (♀).

Type locality: Nefasit, ERITREA (K. Escherich; F. Silvestri).

3. *Crematogaster amabilis* (SANTSCHI).

*Crematogaster amabilis* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXIX, p. 355 (♀); 1912, Bull. Soc. Ent. France, p. 412 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 91 (♀, ♀, ♂).

Type locality: Kilema, Mt. Kilimanjaro, 1440 m., GERMAN EAST AFRICA (Alluaud).

BRITISH EAST AFRICA: Crater of Longonot, Rift Valley, 2450 m.; Kijabe, Kikuyu Escarpment, 2100 m.; Molo, Mau Escarpment, 2420 m. (Alluaud and Jeannel). GERMAN EAST AFRICA: Mt. Kilimanjaro, near the Bismarekhügel, 2700-2800 m. (Alluaud and Jeannel).

4. *Crematogaster brunneipennis* (ERN. ANDRÉ).

*Crematogaster brunneipennis* ERN. ANDRÉ, 1890, Rev. d'Ent. Caen, IX, p. 323 (♀, ♀). MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 144.

*Crematogaster brunneipennis* DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 80.

Type locality: SIERRA LEONE (Mocquerys).

4a. Subsp. *acaciæ* (FOREL).

*Crematogaster acaciæ* FOREL, 1892, Zool. Anzeiger, XV, p. 141 (♀). KELLER, *ibid.*, p. 139. H. KOHL, 1909, Natur u. Offenbarung, LV, p. 152.

*Crematogaster acaciæ* FOREL, 1892, Mitth. Schweiz. Ent. Ges., VIII, p. 353 (♀).  
DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 79.

Type locality: Faf Plain, Webi River, ABYSSINIA (C. Keller).

4a<sub>1</sub>. Var. *generosa* (SANTSCHI).

*Crematogaster acaciæ* var. *generosa* SANTSCHI, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 343 (♀, ♀).

Type locality: Durban, NATAL (G. Arnold).

4a<sub>2</sub>. Var. **gloriosa** (SANTSCHI).

*Crematogaster acaciæ* var. *gloriosa* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 346 (♀).

Type locality: Boma, BELGIAN CONGO (F. Silvestri).

4a<sub>3</sub>. Var. **victoriosa** (SANTSCHI). See p. 152.

*Crematogaster acaciæ* subsp. *victoriosa* SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 497 (♀).

*Crematogaster acaciæ* subsp. *victoriosa* SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 15. ARNOLD, 1920, Ann. South African Mus., XIV, pp. 488 and 500, fig. 35 (♀).

Type locality: Victoria Falls, RHODESIA (G. Arnold).

BELGIAN CONGO: Zambi (J. Bequaert). NATAL: Durban (G. Arnold).

4b. Subsp. **omniparens** (FOREL), *teste* SANTSCHI *in litt.*

*Crematogaster brunneipennis* subsp. *omniparens* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 237 (♀).

*Crematogaster brunneipennis* subsp. *omniparens* ARNOLD, 1920, Ann. South African Mus., XIV, pp. 488 and 499, fig. 34 (♀).

Type locality: Durban, NATAL (C. B. Cooper; G. Arnold).

5. **Crematogaster capensis** (MAYR).

*Crematogaster capensis* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 764 (♂, ♀); 1863, *ibid.*, XIII, p. 404. ROGER, 1863, 'Verzeich. Formicid.,' p. 37. MAYR, 1865, 'Reise Novara, Zool.,' II, Formicidæ, p. 103 (♂, ♀), Pl. iv, fig. 30. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 80. ARNOLD, 1920, Ann. South African Mus., XIV, p. 512 (♂, ♀).

Type locality: Cape of Good Hope (Novara Expedition).

5<sub>1</sub>. Var. **calens** (FOREL).

*Crematogaster capensis* var. *calens* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 435 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 513 (♀).

Type locality: Delagoa, PORTUGUESE EAST AFRICA (Liengme).

5a. Subsp. **tropicorum** (FOREL).

*Crematogaster capensis* subsp. *tropicorum* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 435 (♀).

Type locality: Ibo, PORTUGUESE EAST AFRICA.

6. **Crematogaster castanea** F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 136 (♂, ♀), Pl. ix, fig. 2. See p. 1022.

*Crematogaster tricolor* GERSTÄCKER, 1858, Monatsb. Ak. Wiss. Berlin, p. 263 (♂); in Peters, 1862, 'Reise n. Mossambique, Zool.,' V, p. 515 (♂), Pl. xxxii, fig. 10.

*Crematogaster arboreus* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 138 (♂), Pl. xiv (nest) (*nec* Mayr, *teste* Arnold).

*Crematogaster castanea* ROGER, 1863, 'Verzeich. Formicid.,' p. 37. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 404. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 80. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 99. LAMBORN, 1920, Trans. Ent. Soc. London, (1919), Proc., p. liii. ARNOLD, 1920, Ann. South African Mus., XIV, p. 488 (♂, ♀).

*Crematogaster arborea* ROGER, 1863, 'Verzeich. Formicid.,' p. 37. ARNOLD, 1920, Ann. South African Mus., XIV, p. 506 (♀).

*Crematogaster tricolor* ROGER, 1863, 'Verzeich. Formicid.,' p. 37. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 405; 1886, *ibid.*, XXXVI, p. 365. FOREL,

1887, Mitth. Schweiz. Ent. Ges., VII, p. 388 (♀, ♂). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 87. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 99. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 139. H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 40. MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 16. SjöSTEDT, 1908, *ibid.*, II, 8, pp. 99, 100, 117. SANTSCHI, 1912, Bull. Soc. Ent. France, p. 412 (♀). FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 213 (♀). SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 21 (♀, ♀). TRÄGÅRDH, *ibid.*, p. 44. REICHENSFELDER, 1915, *ibid.*, V, pp. 8 and 20.

*Cremastogaster tricolor* var. *castanea* FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 80; 1911, Rev. Zool. Afr., III, p. 279 (♀). SANTSCHI, 1912, Bull. Soc. Ent. France, p. 412 (♀); 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 22 (♀).

*Cremastogaster castanea* subsp. *tricolor* ARNOLD, 1920, Ann. South African Mus., XIV, p. 489 (♀, ♀, ♂), Pl. VI, figs. 72 and 72a.

Type locality: Port Natal, NATAL. Originally given by error as "Albania," but this was corrected by Roger in 1863.

BELGIAN CONGO: Kondué (Luja). ORANGE FREE STATE. TRANSVAAL: Valdezia (P. Berthoud). NATAL: Durban; Stamford Hill (I. Trägårdh). CAPE PROVINCE: Cape of Good Hope; Port Alfred (C. B. Cooper; Hewitt); Grahamstown (G. Arnold). PORTUGUESE EAST AFRICA: Delagoa Bay (Liengme); Tete (Peters). ZULULAND: Dukudu (I. Trägårdh). GERMAN EAST AFRICA: Lindi (Lamborn); Tanga (H. Brauns); Mt. Kilimanjaro (Sjöstedt). BRITISH EAST AFRICA: Lamu Island; Fundu Island; W. Pemba (Voeltzkow).

6<sub>1</sub>. Var. *simia* (FOREL).

*Cremastogaster tricolor* var. *simia* FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 6 (♀, ♀, ♂). SANTSCHI, 1912, Bull. Soc. Ent. France, p. 412 (♀); 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 22 (♀).

*Cremastogaster castanea* subsp. *tricolor* var. *simia* ARNOLD, 1920, Ann. South African Mus., XIV, p. 491 (♀, ♀, ♂).

Type locality: Chakamakue, between Lehututu and Letlake, BECHUANALAND (L. Schultze).

GERMAN SOUTHWEST AFRICA: (Peters). NATAL: Stamford Hill (I. Trägårdh).

6<sub>2</sub>. Subsp. *ferruginea* (FOREL) EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 12.

*Cremastogaster ferruginea* FOREL, 1892, Mitth. Schweiz. Ent. Ges., VIII, p. 353 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 81. FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 258 (♀).

*Cremastogaster ferruginea* EMERY, 1895, Ann. Mus. Civ. Genova, XXXV, p. 178 (♀); 1897, *ibid.*, XXXVIII, p. 598.

*Cremastogaster tricolor* subsp. *ferruginea* SANTSCHI, 1912, Bull. Soc. Ent. France, p. 413 (♀).

*Cremastogaster castanea* subsp. *ferruginea* ARNOLD, 1920, Ann. South African Mus., XIV, p. 495 (♀).

Type locality: SOMALILAND (C. Keller).

ABYSSINIA: Lower Ganale (V. Bottego); Webi; Ganale; Ogaden; Daua (Ruspoli). ERITREA: Ghinda; Nefasit (K. Escherich).

6<sub>3</sub>. Var. *aquila* (FOREL).

*Cremastogaster ferruginea* var. *aquila* FOREL, 1907, Rev. d'Ent. Caen, XXVI, p. 139 (♀).

*Cremastogaster tricolor* subsp. *ferruginea* var. *aquila* SANTSCHI, 1912, Bull. Soc. Ent. France, p. 413 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 87 (♀, ♂).

Type locality: South of Lake Rudolf, BRITISH EAST AFRICA (de Rothschild).

BRITISH EAST AFRICA: Naivasha, Rift Valley, 1900 m.; Gilgil, 1980 m.; Nairobi; Voi, Taita, 600 m. (Alluaud and Jeannel).

6a<sub>2</sub>. Var. **bruta** (SANTSCHI).

*Cremastogaster tricolor* subsp. *ferruginea* var. *bruta* SANTSCHI, 1912, Bull. Soc. Ent. France, p. 413 (♀); 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 22 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 87 (♀).

*Cremastogaster castanea* subsp. *rufonigra* var. *bruta* ARNOLD, 1920, Ann. South African Mus., XIV, p. 495 (♀).

Type locality: NATAL.

NATAL: Stamford Hill (I. Trägårdh). BRITISH EAST AFRICA: Naivasha, Rift Valley, 1400 m. (Alluaud and Jeannel). SOUTHERN RHODESIA: Springvale (G. Arnold).

6a<sub>3</sub>. Var. **durbanensis** (FOREL).

*Cremastogaster ferruginea* var. *durbanensis* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 234 (♀).

*Cremastogaster castanea* subsp. *tricolor* var. *durbanensis* ARNOLD, 1920, Ann. South African Mus., XIV, p. 491, fig. 32 (♀, ♀).

Type locality: Durban, NATAL (G. Arnold).

6a<sub>4</sub>. Var. **hararica** (FOREL).

*Cremastogaster ferruginea* var. *hararica* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 97 (♀).

*Cremastogaster tricolor* subsp. *ferruginea* var. *harrarica* SANTSCHI, 1912, Bull. Soc. Ent. France, p. 413 (♀).

*Cremastogaster castanea* subsp. *ferruginea* var. *harrarica* EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 4 (♀).

Type locality: Harar, southern ABYSSINIA (Ilg).

ERITREA: Nefasit (F. Silvestri).

6a<sub>5</sub>. Var. **ulugurensis** (FOREL).

*Cremastogaster ferruginea* var. *ulugurensis* FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 369 (♀).

*Cremastogaster tricolor* subsp. *ferruginea* var. *ulugurensis* SANTSCHI, 1912, Bull. Soc. Ent. France, p. 413 (♀) (*uluguwensis*); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 86 (♀, ♀, ♂).

*Cremastogaster ferruginea* var. *hararica* MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 15, Pl. II (nest).

Type locality: Uluguru Mts., GERMAN EAST AFRICA (Zimmer).

GERMAN EAST AFRICA: Morogoro (Zimmer); Kibonoto, Mt. Kilimanjaro (Sjöstedt). BRITISH EAST AFRICA: Nairobi, Kikuyu, 1700 m.; Blue Post Hotel, Tethania River, 1520 m. (Alluaud and Jeannel).

6a<sub>6</sub>. Var. **yambatensis** (FOREL).

*Cremastogaster ferruginea* var. *yambatensis* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 353 (♀).

Type locality: Yambata, BELGIAN CONGO (R. Mayné).

6b. Subsp. **insidiosa** (SANTSCHI).

*Cremastogaster castanea* subsp. *insidiosa* SANTSCHI, 1920, Ann. Soc. Ent. France, LXXXVIII, (1919), p. 378 (♀).

Type locality: Balli Neck Pass, GERMAN SOUTHWEST AFRICA (G. Arnold).

6c. Subsp. **inversa** (FOREL).

*Cremastogaster tricolor* var. *inversa* FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 81 (♀); 1909, Ann. Soc. Ent. Belgique, LIII, p. 53 (♀); 1911, Rev. Zool. Afr., I, p. 279 (♀).

*Cremastogaster tricolor* var. *inversa* EMERY, 1912, Annuar. Mus. Zool. Univ. Napoli, N. S., III, No. 26, p. 2 (♀, ♀, ♂).

*Cremastogaster tricolor* subsp. *inversa* SANTSCHI, 1912, Bull. Soc. Ent. France, p. 413 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 86 (♀).

Type locality: Patta Island, BRITISH EAST AFRICA (Voeltzkow).

BELGIAN CONGO: Kondué (Luja). SOUTHERN RHODESIA: Ciuma (Elena d'Aosta). GERMAN EAST AFRICA: between Lake Kivu and Victoria Nyanza (Elena d'Aosta). ZANZIBAR: (Deville). BRITISH EAST AFRICA: Kisumu, Kavirondo Bay (C. Alluaud); Manda Island (Voeltzkow).

6c1. Var. **analys** (SANTSCHI). See p. 152.

*Cremastogaster flaviventris* var. *analys* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 372 (♀). FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 433 (♀, ♀, ♂).

*Cremastogaster tricolor* subsp. *inversa* var. *analys* SANTSCHI, 1912, Bull. Soc. Ent. France, p. 413 (♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

BELGIAN CONGO: Bafwasende to Avakubi (Lang and Chapin); Thysville (J. Bequaert).

6c2. Var. **flaviventris** (SANTSCHI). See p. 152.

*Cremastogaster flaviventris* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 370 (♀, ♀, ♂).

*Cremastogaster tricolor* subsp. *inversa* var. *flaviventris* SANTSCHI, 1912, Bull. Soc. Ent. France, p. 413 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 86 (♀).

Type locality: Sankuru, BELGIAN CONGO (Luja).

CENTRAL UGANDA: (C. Alluaud). BELGIAN CONGO: Garamba (Lang and Chapin).

6d. Subsp. **museisapientiae** FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 272 (♀, ♀, ♂).

*Cremastogaster tricolor* subsp. *museisapientiae* SANTSCHI, 1912, Bull. Soc. Ent. France, p. 413 (♀).

Type locality: Tropical Africa; exact locality unknown.

6e. Subsp. **rufimembrum** (SANTSCHI).

*Cremastogaster tricolor* subsp. *rufimembrum* SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 431 (♀).

Type locality: Khutu Steppe, GERMAN EAST AFRICA (K. Schwartz).

6f. Subsp. **rufonigra** (EMERY).

*Cremastogaster tricolor* subsp. *rufonigra* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 27 (♀).



*Crematogaster tricolor* var. *rufonigra* FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 22 (♀); in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 6 (♀).

*Crematogaster tricolor* subsp. *rufoniger* SANTSCHI, 1912, Bull. Soc. Ent. France, p. 413 (♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, pp. 124 and 352 (♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 342 (♀).

*Crematogaster castanea* subsp. *rufonigra* ARNOLD, 1920, Ann. South African Mus., XIV, p. 492 (♀, ♂, ♂).

Type locality: Hebron, TRANSVAAL (E. Simon).

TRANSVAAL: Hamman's Kraal (E. Simon); Pretoria (F. Silvestri). SOUTHERN RHODESIA: common (G. Arnold). GERMAN EAST AFRICA: Kibosho (H. Brauns). BELGIAN CONGO: Elisabethville (Leplae). GERMAN SOUTHWEST AFRICA: (Lübbert). KALAHARI: Kakir (L. Schultze).

6f<sub>1</sub>. Var. **busschodtsi** (EMERY).

*Crematogaster tricolor* var. *busschodtsi* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 487 (♀). MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 80. FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 80.

*Crematogaster tricolor* subsp. *rufoniger* var. *busschodtsi* SANTSCHI, 1912, Bull. Soc. Ent. France, p. 413 (♀).

Type locality: Banana, BELGIAN CONGO (Busschodts).

BRITISH EAST AFRICA: Fundu Island, W. Pemba (Voeltzkow).

6f<sub>2</sub>. Var. **cacodæmon** (FOREL).

*Crematogaster peringueyi* subsp. *cacodæmon* (part) FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) I, p. 234 (♀, ♂, ♂).

*Crematogaster castanea* subsp. *rufonigra* var. *cacodæmon* ARNOLD, 1920, Ann. South African Mus., XIV, p. 494 (♀, ♂, ♂).

Type locality: Willowmore, CAPE PROVINCE (G. Arnold).

6f<sub>3</sub>. Var. **mediorufa** (FOREL).

*Crematogaster tricolor* var. *mediorufa* FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 81, footnote (♀, ♂). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 372 (♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 124 (♀, ♂, ♂).

*Crematogaster tricolor* subsp. *rufonigra* var. *mediorufa* SANTSCHI, 1912, Bull. Soc. Ent. France, p. 413 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 86 (♀).

*Crematogaster castanea* subsp. *rufonigra* var. *medio-rufa* ARNOLD, 1920, Ann. South African Mus., XIV, p. 493 (♀, ♂, ♂), Pl. VI, figs. 77, 77a, and 77b.

Type locality: Shilouvane, TRANSVAAL (Junod).

BELGIAN CONGO: Bamu Island (A. Weiss). BRITISH EAST AFRICA: Tiwi (Alluaud and Jeannel). CAPE PROVINCE: Aberdeen (H. Brauns).

6f<sub>4</sub>. Var. **quisquilia** SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 502 (♀).

*Crematogaster castanea* subsp. *rufonigra* var. *quisquilia* ARNOLD, 1920, Ann. South African Mus., XIV, p. 495 (♀).

Type locality: Victoria Falls, RHODESIA (G. Arnold).

7. **Crematogaster censor** (FOREL).

*Crematogaster senegalensis* subsp. *censor* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 434 (♀).

Type locality: Senegal (Æberli).

7a. Subsp. **junodi** (FOREL).

*Cremastogaster censor* subsp. *junodi* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 406 (♀).

Type locality: Shilouvane, TRANSVAAL (Junod).

8. **Cremastogaster chiarinii** EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 117; 1897, *ibid.*, XXXVIII, p. 598; 1899, *ibid.*, XXXIX, p. 500; 1901, Bull. Soc. Ent. Italiana, XXXIII, p. 61. H. KOHL, 1909, Natur u. Offenbarung, LV, pp. 152 and 168.

*Cremastogaster chiarinii* EMERY, 1881, Ann. Mus. Civ. Genova, XVI, pp. 271, fig. (♀) and 535. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 80. WASMANN, 1894, 'Verzeichn. Myrmecoph. Termitoph. Arthrop.,' p. 120. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 99. WASMANN, 1896, Notes Leyden Mus., XVIII, p. 76. F. KOHL, 1907, Denkschr. Ak. Wiss. Wien, LXXI, p. 282 (♀, ♀). MAYR, 1907, Sitzb. Ak. Wiss. Wien, math. naturw. Kl., CXVI, Abt. 1, p. 388; in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 16 (♀, ♀, ♂). SJÖSTEDT, 1908, *ibid.*, II, 8, pp. 99 and 115. WASMANN, 1911, Tijdschr. v. Ent., LIV, p. 201. SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 85 (♀). REICHENSBERGER, 1915, Med. Göteborgs Mus. Zool. Afd., V, p. 35.

Type locality: Kaka, Schoa, ABYSSINIA (Antinori).

SOUTHERN ARABIA: Tes (Doria and Beccari); Ras Fartak (O. Simony); Gischin (W. Hein). ERITREA: Saati (Belli). SOMALILAND: Obbia (Bricchetti-Robecchi). ABYSSINIA: Dimé to Bass Narok (V. Bottego); southern Abyssinia (A. Ilg); Ogaden (Ruspoli). ANGLO-EGYPTIAN SUDAN: Khor Attar; Taufikia near Fashoda (F. Werner). BRITISH EAST AFRICA: Lusinga Island, Victoria Nyanza (C. Alluaud). GERMAN EAST AFRICA: Kibonoto, Mt. Kilimandjaro; Ngare na Nyuki R., Mt. Meru (Sjöstedt).

8<sub>1</sub>. Var. **æthiops** (FOREL).

*Cremastogaster chiarinii* var. *æthiops* FOREL, 1907, Rev. d'Ent. Caen, XXVI, p. 142, footnote (♀).

Type locality: SOMALILAND (Keller).

8<sub>2</sub>. Var. **affabilis** (FOREL).

*Cremastogaster chiarinii* var. *affabilis* FOREL, 1907, Rev. d'Ent. Caen, XXVI, p. 142 (♀).

Type locality: Daouele Region, SOMALILAND (de Rothschild).

ABYSSINIA: Harar (Ilg).

8<sub>3</sub>. Var. **cincta** EMERY, 1896, Ann. Mus. Civ. Genova, XXXVII, p. 157 (♀); 1897, *ibid.*, XXXVIII, p. 598 (♀); 1899, *ibid.*, XXXIX, p. 500.

*Cremastogaster chiarinii* FOREL, 1892, Mitth. Schweiz. Ent. Ges., VIII, p. 353 (♀, ♀, ♂) (*nec* Emery). WASMANN, *ibid.*, p. 355.

*Cremastogaster chiarinii* FOREL, 1892, Zool. Anzeiger, XV, p. 140 (♀, ♀, ♂). KELLER, *ibid.*, p. 139. (*nec* Emery).

*Cremastogaster chiarinii* var. *cincta* FOREL, 1907, Rev. d'Ent. Caen, XXVI, p. 142, footnote.

Type locality: Lugh, SOMALILAND (V. Bottego).

ABYSSINIA: near the Webi River (C. Keller); Ganale; Ogaden; Hauacio; Leboi (Ruspoli).

8a. Var. **v-nigrum** (FOREL).

*Cremastogaster chiarinii* var. *v-nigrum* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 434 (♀).

Type locality: CONGO.

8a. Subsp. **sellula** SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 431 (♀).

Type locality: Khutu Steppe, GERMAN EAST AFRICA (K. Schwartz).

8b. Subsp. **subsulcata** SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 432 (♀).

*Cremastogaster chiarinii* KARAWAIEV, 1911, Rev. Russe Ent., XI, p. 7 (♀).

Type locality: Khartum, ANGLO-EGYPTIAN SUDAN (Karawaiev).

8c. Subsp. **tædiosa** (FOREL) EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 12.

*Cremastogaster tædiosa* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 98 (♀).

Type locality: Southern ABYSSINIA (Ilg).

ERITREA: Comod, Saati (Belli); Algota (A. Fiori).

9. **Crematogaster cicatriculosa** (ROGER).

*Crematogaster cicatriculosa* ROGER, 1863, Berlin. Ent. Zeitschr., VII, p. 207 (♀); 1863, 'Verzeich. Formicid.,' p. 37. MAYR, 1866, Verh. Zool. Bot. Ges. Wien, XVI, p. 901 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 80.

Type locality: South Africa.

SIERRA LEONE.

10. **Crematogaster constructor** EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 29 (♀), Pl. II, figs. 12, 13.

*Crematogaster constructor* EMERY, in Mayr, 1895, Ann. Naturh. Hofmus. Wien, X, p. 135, footnote, fig. 3 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 487 and 535, fig. 49 (♀).

Type locality: Hamman's Kraal, TRANSVAAL (E. Simon).

10<sub>1</sub>. Var. **kirbyi** (MAYR).

*Crematogaster constructor* var. *kirbyi* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, pp. 135 and 137 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 535 (♀).

Type locality: South Africa.

11. **Crematogaster excisa** (MAYR) H. KOHL, 1909, Natur u. Offenbarung, LV, pp. 109 and 167. See p. 153.

*Crematogaster excisa* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 139 (♀). SANTSCHI, 1912, Bull. Soc. Ent. France, p. 413 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 501 (♀).

Type locality: LOANGO, FRENCH CONGO (H. Brauns).

SIERRA LEONE. BELGIAN CONGO: Zambi; Thysville (J. Bequaert); Faradje; near Iie (Lang and Chapin).

11a. Subsp. **andrei** (FOREL). See p. 153.

*Crematogaster excisa* subsp. *andrei* FOREL, 1911, Rev. Zool. Afr., I, p. 277 (♀); according to Arnold *in litt.*, with 11-jointed antennæ.

*Crematogaster impressa* subsp. *andrei* SANTSCHI, 1912, Bull. Soc. Ent. France, p. 412 (♀).

Type locality: Congo da Lemba, BELGIAN CONGO (R. Mayné).

BELGIAN CONGO: Oso River; Sitaweza between Walikale and Lubutu (J. Bequaert).

11b. Subsp. **cavinota** (Stitz).

*Cremastogaster excisa* subsp. *cavinota* Stitz, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 385, fig. 5 (♀).

Type locality: between Fort de Possel and Fort Cranipel, FRENCH CONGO (Schubotz).

11c. Subsp. **caelestis** (Santschi).

*Cremastogaster caelestis* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXIX, p. 353 (♀). FOREL, 1913, Rev. Zool. Afr., II, p. 324 (♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 346 (♀).

*Cremastogaster excisa* subsp. *caelestis* FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 342.

Type locality: CASAMANCE (Claveau).

BELGIAN CONGO: Kondué (Luja). FRENCH GUINEA: Camayenne (F. Silvestri).

11c<sub>1</sub>. Var. **dirce** (Forel).

*Cremastogaster excisa* subsp. *caelestis* var. *dirce* FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 342 (♀).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

11d. Subsp. **impressa** (Emery) Santschi *in litt.*

*Cremastogaster impressa* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 486 (♀, ♀). H. KOHL, 1909, Natur u. Offenbarung, LV, pp. 103 and 167.

*Cremastogaster impressa* FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, pp. 59 and 69 (♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 373 (♀). FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 270 (♀). SANTSCHI, 1912, Bull. Soc. Ent. France, p. 412 (♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 353 (♀); 1916, Rev. Suisse Zool., XXIV, p. 408 (♀, ♀, ♂).

Type locality: CAMEROON (Conradt).

IVORY COAST: Bassam (Bonhouse). BELGIAN CONGO: Lower Congo (Solon); Kilongalanga (Kohl); Stanleyville (Kohl); Isangi (Laurent); Congo da Lemba (R. Mayné). FRENCH CONGO: Brazzaville (A. Weiss). CAPE PROVINCE: Algoa Bay (H. Brauns).

11d<sub>1</sub>. Var. **aglæa** Santschi. See p. 153 (♀).

Type locality: Dimbroko, IVORY COAST (Le Moult).

11d<sub>2</sub>. Var. **euphrosyne** Santschi. See p. 153 (♀).

Type locality: Faradje, BELGIAN CONGO (Lang and Chapin).

BELGIAN CONGO: Thysville (Lang and Chapin).

11d<sub>3</sub>. Var. **sapora** (Forel). See p. 154.

*Cremastogaster impressa* var. *sapora* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 408 (♀, ♀).

Type locality: BELGIAN CONGO (Kohl).

BELGIAN CONGO: Yakuluku (Lang and Chapin).

11e. Subsp. **lacustris** (Santschi).

*Cremastogaster excisa* subsp. *lacustris* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 99 (♀).

Type locality: Lusinga Island, Victoria Nyanza, BRITISH EAST AFRICA (C. Alluaud).

11f. Subsp. **maynei** (FOREL).

*Cremastogaster impressa* subsp. *maynei* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 352 (♀).

Type locality: Congo da Lemba, BELGIAN CONGO (R. Mayné).

12. **Crematogaster foraminiceps** (SANTSCHI).

*Cremastogaster foraminiceps* SANTSCHI, 1912, Bull. Soc. Ent. France, p. 412 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 89 (♀, ♀, ♂). RAF-FRAY, 1913, *ibid.*, Pselaphidæ, p. 55, fig. (nest; without description).

Type locality: Nairobi, Kikuyu, 1700 m., BRITISH EAST AFRICA (Alluaud and Jeannel).

BRITISH EAST AFRICA: River Burgurett, Mt. Kenia, 2200 m.; Mt. Kenia, 2400 m.; River Amboni, 1800 m.; Voi (Alluaud and Jeannel).

12a. Subsp. **nigrans** (FOREL).

*Cremastogaster foraminiceps* subsp. *nigrans* FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 338 (♀, ♀).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

12b. Subsp. **staitchi** (FOREL).

*Cremastogaster foraminiceps* subsp. *staitchi* FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 339 (♀, ♀).

Type locality: Lumaliza, BELGIAN CONGO (Kohl).

13. **Crematogaster gallicola** (FOREL).

*Cremastogaster gallicola* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 95 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 487 and 531, fig. 47 (♀, ♀).

Type locality: DELAGOA (Liengme).

SOUTHERN RHODESIA: Somabula (G. Arnold).

13i. Var. **rauana** (FOREL).

*Cremastogaster gallicola* var. *rauana* FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 22 (♀).

Type locality: Moschi near the Rau River, Arushi-chini, GERMAN EAST AFRICA (Katona).

13a. Subsp. **latro** (FOREL).

*Cremastogaster gallicola* subsp. *latro* FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 6 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 533 (♀).

Type locality: between Kgokong and Kang, BECHUANALAND (L. Schultze).

13b. Subsp. **spuria** (FOREL).

*Cremastogaster gallicola* subsp. *spuria* FOREL, 1913, Rev. Zool. Afr., II, p. 323 (♀). BEQUAERT, *ibid.*, p. 425.

Type locality: Elisabethville, BELGIAN CONGO (J. Bequaert).

14. **Crematogaster gerstaeckeri** (DALLA TORRE).

*Cremastogaster cephalotes* GERSTAECKER, 1871, Arch. f. Naturg., XXXVII, 1, p. 356 (♀, ♀) (*nec* F. Smith); 1873, in 'v. d. Decken's Reisen in Ostafrika, Gliederthiere,' p. 358 (♀, ♀).

*Cremastogaster cephalotes* KELLER, 1892, Zool. Anzeiger, XV, p. 137. H. KOHL, 1909, Natur u. Offenbarung, LV, p. 152.

*Cremastogaster gerstaeckeri* DALLA TORRE, 1892, Wien. Ent. Zeitg., XI, March, p. 90; 1893, 'Cat. Hym.,' VII, p. 82.

*Crematogaster gerstäckeri* FOREL, 1892, Zool. Anzeiger, XV, April, p. 141. ZAVATTARI, 1909, 'Il Ruwenzori, Parte Scientif.,' I, p. 214 (♂, ♀).

*Crematogaster gerstäckeri* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 137 (♀). H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 40.

Type locality: Mombasa, BRITISH EAST AFRICA (v. d. Decken).

UGANDA: Butiti (Duke of Abruzzi).

15. *Crematogaster godefreyi* (FOREL).

*Crematogaster foraminiceps* subsp. *godefreyi* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 237 (♀).

*Crematogaster vulcania* subsp. *godefreyi* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 406.

*Crematogaster newillei* subsp. *carininotum* SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), pp. 279 and 280 (♀).

*Crematogaster sjæstedti* subsp. *godefreyi* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 184.

*Crematogaster godfreyi* ARNOLD, 1920, Ann. South African Mus., XIV, p. 503, fig. 37 (♀).

*Crematogaster newillei* subsp. *carininotum* ARNOLD, 1920, Ann. South African Mus., XIV, p. 499 (♀).

Type locality: King William's Town, CAPE PROVINCE (R. Godfrey).

RHODESIA: Bulawayo (G. Arnold).

151. Var. *arnoldi* (FOREL).

*Crematogaster arnoldi* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 238 (♀).

*Crematogaster godfreyi* var. *arnoldi* ARNOLD, 1920, Ann. South African Mus., XIV, p. 504, fig. 38 (♀).

Type locality: Durban, NATAL (Marley).

16. *Crematogaster gutenbergi* SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 433 (♀).

Type locality: GERMAN SOUTHWEST AFRICA.

17. *Crematogaster ilgi* (FOREL) SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 502.

*Crematogaster scrutans* var. *ilgi* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 259 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 519 (♀).

Type locality: Western ABYSSINIA (Ilg).

TRANSVAAL: Zoutpansberg.

18. *Crematogaster impressiceps* (MAYR). See p. 154.

*Crematogaster impressiceps* MAYR, 1902, Verh. Zool. Bot. Ges. Wien, LII, p. 294 (♀).

Type locality: FERNANDO PO (R. Buchholz).

CAMEROON: Abo (R. Buchholz). BELGIAN CONGO: Panga; Faradje (Lang and Chapin).

181. Var. *frontalis* SANTSCHI. See p. 154 (♀).

Type locality: Malela, BELGIAN CONGO (Lang and Chapin).

BELGIAN CONGO: Kunga near Malela (Lang, Chapin and J. Bequaert).

182. Var. *longiscapa* (STITZ).

*Crematogaster impressiceps* var. *longiscapa* STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 384 (♀), Pl. xx (nest).

Type locality: Duma, BELGIAN CONGO (Schubotz).

18s. Var. *lujana* (FOREL).

*Cremastogaster impressiceps* var. *lujana* FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 340 (♀).

Type locality: Kondué, BELGIAN CONGO (Luja).

19. *Crematogaster inconspicua* (MAYR).

*Cremastogaster inconspicua* MAYR, 1896, Ent. Tidskr., XVII, p. 246 (♂, ♀). AURIVILLIUS, *ibid.*, p. 253, Pl. IV, fig. 1 (nest). SRÖSTEDT, 1904, I Västafrikas Urskogar, p. 504, fig. 1 (nest).

Type locality: CAMEROON (Sjöstedt).

19a. Subsp. *incorrecta* SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV (1916), p. 280 (♂).

Type locality: Gaboon, FRENCH CONGO (F. Faure).

20. *Crematogaster inermis* (MAYR).

*Cremastogaster inermis* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 766 (♂); 1895, Ann. Naturh. Hofmus. Wien, X, p. 137 (♂). KARAWAIEW, 1911, Rev. Russe Ent., XI, p. 8 (♂). ARNOLD, 1920, Ann. South African Mus., XIV, p. 487 (♂).

Type locality: Sinai Peninsula (v. Frauenfeld).

ANGLO-EGYPTIAN SUDAN: Port Sudan (Karawaiew).

20a. Subsp. *delagoensis* (FOREL).

*Cremastogaster inermis* subsp. *delagoensis* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 99 (♂). ARNOLD, 1920, Ann. South African Mus., XIV, p. 539, fig. 51 (♂).

Type locality: DELAGOA (Liengme).

21. *Crematogaster melanogaster* (EMERY).

*Cremastogaster arborea* MAYR, 1866, Verh. Zool. Bot. Ges. Wien, XVI, p. 900 (♂, ♀), Pl. XX, fig. 10; 1886, *ibid.*, XXXVI, p. 360; 1896, Ent. Tidskr., XVII, p. 248, footnote (♂). ARNOLD, 1920, Ann. South African Mus., XIV, p. 507 (♂). (*nec C. arborea* F. Smith, *teste* Mayr and Arnold).

*Cremastogaster arborea* subsp. *melanogaster* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 29 (♂, ♀).

*Cremastogaster arborea* subsp. *melanogaster* FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 7 (♂, ♀); 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 234 (♂). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 486 and 508, fig. 39 (♂, ♀).

Type locality: Port Natal, NATAL (Gueinzius).

CAPE PROVINCE: De Aar (E. Simon); Conway (Hewitt); Willowmore (H. Brauns); Little Namaland (L. Péringuey); Kamaggas (L. Schultze).

22. *Crematogaster menileki* (FOREL) EMERY, 1899, Ann. Mus. Civ. Genova, XXXIX, p. 500.

*Cremastogaster menilekii* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 97 (♂).

*Cremastogaster menileki* SANTSCHI, 1912, Bull. Soc. Ent. France, p. 412 (♂).

Type locality: Schoa, southern ABYSSINIA (Ilg).

ABYSSINIA: Buditu to Dimé (V. Bottego).

22a. Subsp. *occidentalis* (MAYR).

*Cremastogaster menileki* subsp. *occidentalis* MAYR, 1902, Verh. Zool. Bot. Ges. Wien, LII, p. 293 (♂). SANTSCHI, 1912, Bull. Soc. Ent. France, p. 412 (♂).

*Crematogaster menileki* subsp. *occidentalis* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 252 (♂).

Type locality: FERNANDO Po (R. Buchholz).

GOLD COAST. DAHOMEY: Kouande (Desanti).

- 22a<sub>1</sub>. Var. **atrigaster** (FOREL).  
*Crematogaster menileki* subsp. *occidentalis* var. *atrigaster* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 353 (♀).  
 Type locality: Congo da Lemba, BELGIAN CONGO (R. Mayné).
- 22a<sub>2</sub>. Var. **brazzai** (SANTSCHI).  
*Crematogaster impressa* subsp. *brazzai* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 373 (♀, ♀).  
*Crematogaster menileki* subsp. *occidentalis* var. *brazzai* SANTSCHI, 1912, Bull. Soc. Ent. France, p. 412 (♀).  
 Type locality: Brazzaville, FRENCH CONGO (A. Weiss).
- 22b. Subsp. **proserpina** SANTSCHI. See p. 154 (♀).  
 Type locality: Malela, BELGIAN CONGO (Lang and Chapin).
- 22b<sub>1</sub>. Var. **pluton** (SANTSCHI).  
*Crematogaster menileki* subsp. *proserpina* var. *pluton* SANTSCHI, 1919, Rev. Zool. Afr., VII, p. 87 (♀).  
 Type locality: Zambi, BELGIAN CONGO (J. Bequaert).
- 22c. Subsp. **satan** (FOREL).  
*Crematogaster menileki* subsp. *satan* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 407 (♀).  
 Type locality: BELGIAN CONGO (Kohl).
- 22c<sub>1</sub>. Var. **satanula** (FOREL).  
*Crematogaster menileki* subsp. *satan* var. *satanula* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 407 (♀).  
 Type locality: St. Gabriel, BELGIAN CONGO (Kohl).
23. **Crematogaster mimosæ** (SANTSCHI).  
*Crematogaster mimosæ* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 87, fig. 11 (♀).  
 Type locality: Mt. Kenia, 2000 m., BRITISH EAST AFRICA (C. Alluaud).
24. **Crematogaster misella** (ARNOLD).  
*Crematogaster gallicola* subsp. *sjöstedti* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 237 (♀) (*nec* Mayr).  
*Crematogaster misella* ARNOLD, 1920, Ann. South African Mus., XIV, p. 513, fig. 40a (♀).  
 Type locality: Bulawayo, RHODESIA (G. Arnold).
25. **Crematogaster monticola** (ARNOLD).  
*Crematogaster monticola* ARNOLD, 1920, Ann. South African Mus., XIV, p. 517, fig. 40b (♀).  
 Type locality: Mountains of NATAL (Haviland).
26. **Crematogaster newillei** (FOREL) SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), p. 279 (♀).  
*Crematogaster newillei* FOREL, 1907, Rev. d'Ent. Caen, XXVI, p. 140 (♀).  
 SANTSCHI, 1912, Bull. Soc. Ent. France, p. 413 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 497 (♀).  
 Type locality: Uomber, southern ABYSSINIA (de Rothschild).
- 26a. Subsp. **cooperi** (FOREL) SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), p. 280 (♀).



*Crematogaster newvillei* subsp. *cooperi* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 233 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 488 and 497, fig. 33 (♀, ♀), Pl. VI, figs. 76 and 76a.

Type locality: Durban, NATAL (C. B. Cooper).

26a<sub>1</sub>. Var. *ingravis* (FOREL) SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), p. 280 (♀).

*Crematogaster newvillei* subsp. *cooperi* var. *ingravis* FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 341 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 498 (♀).

Type locality: Durban, NATAL (C. B. Cooper).

27. *Crematogaster nigriceps* EMERY, 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 600, fig. (♀).

Type locality: Banas, SOMALILAND (Ruspoli).

ABYSSINIA: Hauacio (Ruspoli).

27a. Subsp. *prelli* (FOREL).

*Crematogaster nigriceps* subsp. *prelli* FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 368 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 98 (♀).

Type locality: Kahe Steppe, GERMAN EAST AFRICA (H. Prell).

UGANDA: Unyoro Province, region of Lake Albert (C. Alluaud).

28. *Crematogaster nigronitens* SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), p. 281 (♀).

*Crematogaster nigronitens* ARNOLD, 1920, Ann. South African Mus., XIV, pp. 486 and 541, fig. 53 (♀).

Type locality: Matoppos Hills, SOUTHERN RHODESIA (G. Arnold).

29. *Crematogaster ochraceiventris* (STITZ).

*Crematogaster ochraceiventris* STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 391, fig. 8 (♀).

Type locality: Fort Crampel, FRENCH CONGO (Schubotz).

30. *Crematogaster opaciceps* (MAYR).

*Crematogaster opaciceps* MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 12 (♀), Pl. I, fig. 1; Pl. II, fig. 3 (nest). ARNOLD, 1920, Ann. South African Mus., XIV, p. 514 (♀).

Type locality: Port Elizabeth, CAPE PROVINCE (H. Brauns).

30<sub>1</sub>. Var. *clepens* (FOREL).

*Crematogaster opaciceps* var. *clepens* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 353 (♀).

Type locality: Congo da Lemba, BELGIAN CONGO (R. Mayné).

30a. Subsp. *defleta* (FOREL).

*Crematogaster opaciceps* subsp. *defleta* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 434 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 515 (♀).

Type locality: TRANSVAAL (C. Keller).

31. *Crematogaster orobia* SANTSCHI, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 343 (♀).

Type locality: Matroosberg, 4500 ft., CAPE PROVINCE (R. W. Tucker).

32. *Crematogaster peringueyi* EMERY, 1895, Ann. Soc. Ent. France, LXIII, p. 27 (♀, ♀, ♂), Pl. II, figs. 16 and 17. RAFFRAY, 1910, Ann. South African Mus., V, 8, pp. 422 and 423.

*Cremastogaster peringueyi* WASMANN, 1897, Wien. Ent. Zeitg., XVI, p. 201; 1898, *ibid.*, XVII, p. 97; 1899, Deutsch. Ent. Zeitschr., p. 170. MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 14, Pl. II, fig. 4 (nest). FÖREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 7 (♀, ♀, ♂); 1913, Deutsch. Ent. Zeitschr., Beih., p. 213 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 509 (♀, ♀, ♂), Pl. VI, fig. 83.

Type locality: Cape Town, CAPE PROVINCE (E. Simon; L. Péringuey).

CAPE PROVINCE: Port Elizabeth (H. Brauns); Port Alfred (Hewitt); Port Nolloth; Steinkopf (L. Schultze); Pirie Forest (G. Rogers).

32. Var. **angustior** (ARNOLD).

*Cremastogaster peringueyi* subsp. *cacodæmon* (part) FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 234 (♀, ♀, ♂).

*Cremastogaster peringueyi* var. *angustior* ARNOLD, 1920, Ann. South African Mus., XIV, p. 510, fig. 40 (♀, ♀, ♂).

Type locality: Durban, NATAL (C. B. Cooper).

32. Var. **cacochyma** (FOREL).

*Cremastogaster peringueyi* subsp. *cacochyma* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 235 (♀, ♀).

*Cremastogaster peringueyi* var. *cacochyma* ARNOLD, 1920, Ann. South African Mus., XIV, p. 512 (♀, ♀).

Type locality: not given; probably CAPE PROVINCE.

32. Var. **gedeon** (FOREL).

*Cremastogaster peringueyi* subsp. *cacodæmon* var. *gedeon* FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 341 (♀).

*Cremastogaster peringueyi* var. *gedeon* ARNOLD, 1920, Ann. South African Mus., XIV, p. 512 (♀).

Type locality: Pietermaritzburg, NATAL (R. Bayer).

NATAL: New Hanover Rail. (C. B. Hardenburg).

33. **Crematogaster rivai** EMERY, 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 598, fig. (♀).

Type locality: Webi, ABYSSINIA (Ruspoli).

ABYSSINIA: Ganale (Ruspoli).

34. **Crematogaster ruspolii** FOREL, 1892, Zool. Anzeiger, XV, p. 142 (♀, ♂). KELLER, *ibid.*, p. 139. H. KOHL, 1909, Natur u. Offenbarung, LV, pp. 152 and 168.

*Cremastogaster ruspolii* FOREL, 1892, Mitth. Schweiz. Ent. Ges., VIII, p. 353 (♀, ♂). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 85.

Type locality: Faf, ABYSSINIA (C. Keller).

ABYSSINIA: Webi River (C. Keller).

34. Var. **atriscapis** (FOREL).

*Cremastogaster ruspolii* var. *atriscapis* FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 338 (♀); 1916, Rev. Suisse Zool., XXIV, p. 405 (♀).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

35. **Crematogaster schultzei** (FOREL).

*Cremastogaster schultzei* FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 6 (♀, ♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 486 and 519, fig. 41 (♀, ♀).

Type locality: Steinkopf, CAPE PROVINCE (L. Schultze).

CAPE PROVINCE: Kamaggas; Prince of Wales Bay (L. Schultze).

36. **Crematogaster sewellii** (FOREL). See p. 1023.

36a. Subsp. **acis** (FOREL).

*Crematogaster sewellii* subsp. *acis* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 353 (♀).

Type locality: Congo da Lemba, BELGIAN CONGO (R. Mayné).

36b. Subsp. **marnoi** (MAYR). See p. 1024.

*Crematogaster sewellei* var. *marnoi* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 138 (♀); 1907, Sitzb. Ak. Wiss. Wien, math. naturw. Kl., CXVI, Abt. 1, p. 388.

*Crematogaster sewellei* subsp. *marnoi* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 376 (♀).

Type locality: Sudan (E. Marno).

FRENCH CONGO: Gomba (A. Weiss). ANGLO-EGYPTIAN SUDAN: Mongalla (F. Werner).

37. **Crematogaster sjöstedti** (MAYR).

*Crematogaster sjöstedti* MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.', II, 8, p. 17 (♀). Sjöstedt, 1908, *ibid.*, II, 8, p. 116. SANTSCHI, 1918, Bull. Soc. Ent. France, p. 184.

*Crematogaster gallicola* subsp. *sjöstedti* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 124. SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 94 (♀).

Type locality: Usambara, near Tanda, GERMAN EAST AFRICA (Sjöstedt).

GERMAN EAST AFRICA: New Moschi, Mt. Kilimanjaro, 800 m. (Alluaud and Jeannel).

37<sub>1</sub>. Var. **maledicta** (FOREL).

*Crematogaster excisa* var. *maledicta* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 236 (♀, ♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 502, fig. 36 (♀, ♀).

*Crematogaster sjöstedti* var. *maledicta* SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 15.

Type locality: Bulawayo, RHODESIA (G. Arnold).

37<sub>2</sub>. Var. **pulla** (SANTSCHI).

*Crematogaster gallicola* subsp. *sjöstedti* var. *pulla* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 94 (♀).

Type locality: Mbuyuni, Pori, 1110 m., BRITISH EAST AFRICA (Alluaud and Jeannel).

BRITISH EAST AFRICA: Taveta, 750 m. (Alluaud and Jeannel).

37<sub>3</sub>. Var. **rufescens** (SANTSCHI).

*Crematogaster sjöstedti* subsp. *bulawayensis* var. *rufescens* SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 236 (♀).

Type locality: NATAL (Haviland).

37a. Subsp. **kohliella** (FOREL).

*Crematogaster excisa* subsp. *andrei* var. *kohliella* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 409 (♀).

*Crematogaster sjöstedti* subsp. *kohliella* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 185.

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

38. **Crematogaster solers** (FOREL).

*Crematogaster solers* FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 7 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 516 (♀).

Type locality: Arasab River, near Kubub, GERMAN SOUTHWEST AFRICA (L. Schultze).

39. **Crematogaster stigmata** (SANTSCHI).

*Crematogaster stigmata* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 344, fig. 15 (♀, ♂).

Type locality: Olokemeji, NIGERIA (F. Silvestri).

40. **Crematogaster vulcania** (SANTSCHI).

*Crematogaster vulcania* SANTSCHI, 1912, Bull. Soc. Ent. France, p. 413 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 94, fig. 13 (♀, ♀, ♂). LECERF, 1914, *ibid.*, 'Chenilles Galles Formicides,' pp. 5, 11, 13, 17, 18, 23, and 25.

Type locality: Longonot Neck, 2140 m., BRITISH EAST AFRICA (Alluaud and Jeannel).

41. **Crematogaster werneri** (MAYR).

*Crematogaster werneri* MAYR, 1907, Sitzb. Ak. Wiss. Wien, math. naturw. Kl., CXVI, Abt. 1, p. 388 (♀).

Type locality: Gondokoro, UGANDA (F. Werner).

41. Var. **cacozela** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 253.

*Crematogaster cacozela* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar., VIII, p. 342 (♀).

Type locality: Camayenne, FRENCH GUINEA (F. Silvestri).

41. Var. **pasithea** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 253 (♀).

Type locality: LOWER DAHOMEY (Desanti).

## Subgenus 2. **Sphærocrema** SANTSCHI

*Crematogaster* subg. *Sphærocrema* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 182.

Subgenotype: *Crematogaster kneri* Mayr, 1862.

42. **Crematogaster (Sphærocrema) bequaerti** (FOREL).

*Crematogaster bequaerti* FOREL, 1913, Rev. Zool. Afr., II, p. 319 (♀, ♀). BEQUAERT, *ibid.*, p. 425. SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 93, fig. 12a (♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 348, fig. 17a (♀).

*Crematogaster (Sphærocrema) bequaerti* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 182.

Type locality: Sankisia, BELGIAN CONGO (J. Bequaert).

42. Var. **atraplex** SANTSCHI. See p. 155 (♀).

Type locality: Yakuluku, BELGIAN CONGO (Lang and Chapin).

42. Var. **gerardi** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 252 (♀).

Type locality: Kataki, BELGIAN CONGO (Gérard).

42. Var. **mutabilis** (SANTSCHI).

*Crematogaster bequaerti* var. *mutabilis* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 93, fig. 12b (♀).

Type locality: Lumbwa, Mau Escarpment, 1900 m., BRITISH EAST AFRICA (Alluaud and Jeannel).

42a. Subsp. **ludia** (FOREL).

*Crematogaster bequaerti* subsp. *ludia* FOREL, 1913, Rev. Zool. Afr., II, p. 321 (♀).

Type locality: Lake Kabwe, BELGIAN CONGO (J. Bequaert).

43. **Crematogaster (Sphærocrema) chlorotica** EMERY.

*Crematogaster chlorotica* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 483 (♀, ♀).

*Crematogaster chlorotica* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 374 (♀). FOREL, 1913, Rev. Suisse Zool., XXI, p. 669 (♀).

*Crematogaster (Sphærocrema) chlorotica* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 182.

Type locality: CAMEROON (Conradt).

SIERRA LEONE. CAMEROON: Johann-Albrechtshöhe (Conradt). FRENCH CONGO: Brazzaville (A. Weiss).

44. **Crematogaster (Sphærocrema) concava** EMERY. See p. 155.

*Crematogaster concava* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 480 (♀; nec ♀).

*Crematogaster concava* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 375 (♀, ♀, ♂). FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 338 (♀); 1916, Rev. Suisse Zool., XXIV, p. 404 (♀, ♀, ♂). STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 384 (♀).

*Crematogaster (Sphærocrema) concava* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 182.

Type locality: Popokabaka, BELGIAN CONGO.

CAMEROON. FRENCH CONGO: Brazzaville (A. Weiss); Fort de Possel to Fort Crampel (Schubotz). BELGIAN CONGO: St. Gabriel (Kohl); Lukolela to Basoko; Stanleyville; Akenge (Lang and Chapin).

45. **Crematogaster (Sphærocrema) gambiensis** (ERN. ANDRÉ).

*Crematogaster gambiensis* ERN. ANDRÉ, 1889, Rev. d'Ent. Caen, VIII, p. 228 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 82. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 137; 1907, Sitzb. Ak. Wiss. Wien, math. naturw. Kl., CXVI, Abt. 1, p. 387. FOREL, 1913, Rev. Zool. Afr., II, p. 324 (♀, ♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 346 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 529 (♀).

*Crematogaster gambiensis* var. *longiruga* FOREL, 1907, Rev. d'Ent. Caen, XXVI, p. 140 (♀, ♀, ♂).

Type locality: GAMBIA (Mocquerys).

FRENCH GUINEA: Konakry (F. Silvestri). SIERRA LEONE: Samlia Falls, River N'Gamie. GOLD COAST. SLAVE COAST. BELGIAN CONGO: Kwesi to Kilo (Bayer). ANGLO-EGYPTIAN SUDAN: Mongalla (F. Werner). UGANDA: Gondokoro (F. Werner). BRITISH EAST AFRICA: Rendilé, Mt. Karoli; Mt. Nyiro (de Rothschild).

45a. Var. **krantziana** (FOREL).

*Crematogaster gambiensis* var. *krantziana* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 234 (♀, ♂). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 487 and 530 (♀, ♀, ♂).

Type locality: Krantz Kloof near Durban, NATAL (Marley).

45b. Var. **transversiruga** (SANTSCHI).

*Crematogaster gambiensis* var. *transversiruga* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 346 (♀).

Type locality: Lado, Redjaf, ANGLO-EGYPTIAN SUDAN (Reichensperger).

46. **Crematogaster (Sphærocrema) kneri** (MAYR).

*Crematogaster kneri* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 764 (♀); 1863, ibid., XIII, p. 404. ROGER, 1863, 'Verzeich. Formicid.,' p. 36. DALLA TORRE,

1893, 'Cat. Hym.,' VII, p. 82. FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 433 (♂, ♀, ♂); 1913, *ibid.*, LVII, p. 125 (♂, ♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 487 and 525, fig. 45 (♂, ♀).

*Crematogaster kneri* EMERY, 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 598 (♂); 1899, Ann. Soc. Ent. Belgique, XLIII, p. 483.

*Crematogaster (Sphærocrema) kneri* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 182.

Type locality: Akwapim Mts., GOLD COAST.

ABYSSINIA: Ganale (Ruspoli). ORANGE FREE STATE: Bothaville (H. Brauns). NATAL: (Haviland). BELGIAN CONGO: (Seeldrayers).

46<sub>1</sub>. Var. **amita** (FOREL).

*Crematogaster kneri* var. *amita* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 125 (♂). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 487 and 527 (♂), Pl. VI, fig. 75.

Type locality: Bulawayo, RHODESIA (G. Arnold).

46<sub>2</sub>. Var. **matabele** (ARNOLD).

*Crematogaster kneri* var. *matabele* ARNOLD, 1920, Ann. South African Mus., XIV, pp. 487 and 528, fig. 46 (♂).

Type locality: Hillside, Bulawayo, RHODESIA (G. Arnold).

46a. Subsp. **hottentota** EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 482 (♂).

*Crematogaster kneri* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 27 (♂) (*nec* Mayr).

*Crematogaster kneri* subsp. *hottentota* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 125 (♂). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 487 and 528 (♂).

Type locality: Vrijburg, CAPE PROVINCE (E. Simon).

SOUTHERN RHODESIA: Bedza, Matoppo Hills; Springvale; Sipapoma (G. Arnold). ORANGE FREE STATE: Bloemfontein (E. Simon).

47. ***Crematogaster (Sphærocrema) libengensis*** (STITZ).

*Crematogaster libengensis* STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 389, fig. 7 (♂).

Type locality: Libenge, BELGIAN CONGO (Schubotz).

48. ***Crematogaster (Sphærocrema) luctans*** (FOREL).

*Crematogaster luctans* FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 22 (♂, ♀).

*Crematogaster luctans* EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 12.

*Crematogaster (Sphærocrema) luctans* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 182.

Type locality: Mto-ya-Kifaru, GERMAN EAST AFRICA (Katona).

ERITREA: Nefasit (F. Silvestri).

49. ***Crematogaster (Sphærocrema) nigeriensis*** (SANTSCHI):

*Crematogaster nigeriensis* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 346, fig. 16 (♂).

*Crematogaster (Sphærocrema) nigeriensis* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 182.

Type locality: Lagos, SOUTHERN NIGERIA (F. Silvestri).

49<sub>1</sub>. Var. **wilniger** (FOREL).

*Crematogaster nigeriensis* var. *wilniger* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 405 (♂, ♀).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

50. **Crematogaster (Sphærocrema) pronotalis** SANTSCHI.

*Crematogaster pronotalis* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 347, fig. 17b (♀).

*Crematogaster pronotalis* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 252 (♀).

*Crematogaster (Sphærocrema) pronotalis* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 182.

Type locality: Olokemeji, NIGERIA (F. Silvestri).

50<sub>1</sub>. Var. **behanzini** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 251 (♀).

Type locality: Kotonou, DAHOMEY.

50<sub>2</sub>. Var. **dakarensis** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 252 (♀).

*Crematogaster pronotalis* var. *dakarensis* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 349 (♀).

Type locality: Dakar, SENEGAMBIA (F. Silvestri).

50<sub>3</sub>. Var. **funerea** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 251 (♀).

Type locality: Molundu, CAMEROON (Reichensperger).

50<sub>4</sub>. Var. **liebknechti** (FOREL). See p. 156.

*Crematogaster pronotalis* var. *liebknechti* FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 340 (♀).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

BELGIAN CONGO: Yakuluku; Garamba (Lang and Chapin).

51. **Crematogaster (Sphærocrema) rugosa** (ERN. ANDRÉ) SANTSCHI, 1919, Rev. Zool. Afr., VII, p. 870.

*Crematogaster rugosa* ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 3 (♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 348, fig. 17c (♀).

*Crematogaster rugosa* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 484 (♀, ♀).

Type locality: Ogowé, FRENCH CONGO (Mocquerys).

IVORY COAST: Bassam. CAMEROON. BELGIAN CONGO: Avakubi (J. Bequaert).

51<sub>1</sub>. Var. **nigriventris** SANTSCHI, 1919, Rev. Zool. Afr., VII, p. 87 (♀).

Type locality: Dimbroko, IVORY COAST (Le Moult).

51<sub>2</sub>. Var. **rugaticeps** SANTSCHI, 1919, Rev. Zool. Afr., VII, p. 87 (♀).

Type locality: Molundu, CAMEROON (Reichensperger).

52. **Crematogaster (Sphærocrema) rugosior** (SANTSCHI). See p. 156 (♀).

*Crematogaster luctans* subsp. *rugosior* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 375 (♀). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 405 (♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

BELGIAN CONGO: (Kohl); Stanleyville (Lang, Chapin and Bequaert).

53. **Crematogaster (Sphærocrema) sejuncta** (STITZ).

*Crematogaster sejuncta* STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 387, fig. 6 (♀).

Type locality: Koloka near Angu, Belgian Congo (Schubotz).

54. **Crematogaster (Sphærocrema) similis** (STITZ).

*Crematogaster similis* STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08),' III, p. 388, fig. 7 (♀).

*Cremastogaster (Sphaerocrema) similis* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 182.

Type locality: Mt. Karisimbi, north of Lake Kivu, BELGIAN CONGO (Schubotz).

55. *Crematogaster (Sphaerocrema) striatula* EMERY.

*Crematogaster striatulus* EMERY, 1892, Ann. Soc. Ent. France, LXI, Bull., p. liii (♂); 1899, Ann. Soc. Ent. Belgique, XLIII, p. 482 (♀). H. KOHL, 1909, Natur u. Offenbarung, LV, pp. 103 and 167.

*Crematogaster striatula* DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 86. SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 374 (♀). Stitz, 1910, Mitt. Zool. Mus. Berlin, V, p. 141 (♀). SANTSCHI, 1911, Ann. Soc. Ent. Belgique, LV, p. 282; 1914, Deutsch. Ent. Zeitschr., p. 288 (♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 342 (♀).

*Crematogaster (Sphaerocrema) striatula* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 182.

Type locality: Assinie, IVORY COAST (C. Alluaud).

SIERRA LEONE: IVORY COAST: (Lohier). GOLD COAST: Aburi (F. Silvestri). CAMEROON: Duala (v. Rothkirch). SPANISH GUINEA: Alen (Tessmann). FRENCH CONGO: Gomba (A. Weiss).

551. Var. *benitensis* (SANTSCHI).

*Crematogaster striatula* var. *benitensis* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 374 (♀).

Type locality: River Benito, SPANISH GUINEA (de Brazza).

552. Var. *obstinata* (SANTSCHI). See p. 157.

*Crematogaster striatula* var. *obstinata* SANTSCHI, 1911, Rev. Zool. Afr., I, p. 207 (♀).

Type locality: Gomba, FRENCH CONGO (A. Weiss).

BELGIAN CONGO: Leopoldville (J. Bequaert).

56. *Crematogaster (Sphaerocrema) wilwerthi* (SANTSCHI).

*Crematogaster wilwerthi* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 372, fig. 6 (♀).

Type locality: Luki, BELGIAN CONGO (Wilwerth).

561. Var. *confusa* (SANTSCHI).

*Crematogaster wilwerthi* var. *confusa* SANTSCHI, 1911, Rev. Zool. Afr., I, p. 208 (♀).

Type locality: Gomba, FRENCH CONGO (A. Weiss).

562. Var. *fauconneti* (FOREL).

*Crematogaster wilwerthi* var. *fauconneti* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 434 (♀).

Type locality: Nyangwe to Stanleyville, BELGIAN CONGO (Fauconnet).

### Subgenus 3. *Orthocrema* SANTSCHI

*Crematogaster* subg. *Orthocrema* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 182.

Subgenotype: *Myrmica sordidula* Nylander, 1849.

57. *Crematogaster (Orthocrema) jeanneli* (SANTSCHI).

*Crematogaster jeanneli* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 100 (♀).

Type locality: River Tchania, 1520 m., BRITISH EAST AFRICA (Alluaud and Jeannel).



58. *Crematogaster (Orthocrema) muralti* (FOREL).*Crematogaster muralti* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 432 (♀).

Type locality: CAMEROON (L. v. Muralt).

58a. Subsp. *livingstonei* SANTSCHI, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 344 (♀).*Crematogaster muralti* subsp. *livingstonei* ARNOLD, 1920, Ann. South African Mus., XIV, pp. 486 and 536, fig. 50 (♀).

Type locality: Livingstone, NORTHERN RHODESIA (G. Arnold).

58b. Subsp. *ugandensis* (SANTSCHI).*Crematogaster muralti* subsp. *ugandensis* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 99 (♀).

Type locality: Unyoro Province, near Hoima, UGANDA (C. Alluaud).

59. *Crematogaster (Orthocrema) pauciseta* EMERY.*Crematogaster pauciseta* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 485, fig. (♀, ♀).*Crematogaster pauciseta* FOREL, 1913, Rev. Suisse Zool., XXI, p. 669 (♀, ♀, ♂); 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 340 (♀).*Crematogaster (Orthocrema) pauciseta* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 182.

Type locality: CAMEROON (Conradt).

BELGIAN CONGO: Kilongalonga near St. Gabriel (Kohl).

59a. Subsp. *dolens* (FOREL).*Crematogaster dolens* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 433 (♀).

Type locality: ZANZIBAR (Voeltzkow).

59b. Subsp. *grossulior* (FOREL).*Crematogaster pauciseta* subsp. *grossulior* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 404 (♀).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

60. *Crematogaster (Orthocrema) sordidula* (NYLANDER). See p. 1024.*Myrmica sordidula* NYLANDER, 1849, Acta Soc. Sc. Fennicæ, III, 1, p. 44 (♀).*Crematogaster sordidula* MAYR, 1855, Verh. Zool. Bot. Ges. Wien, V, p. 472 (♀, ♀).*Crematogaster sordidula* DIXEY and LONGSTAFF, 1907, Trans. Ent. Soc. London, pp. 336 and 371. ARNOLD, 1920, Ann. South African Mus., XIV, p. 537.*Crematogaster (Orthocrema) sordidula* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 182.

Type locality: not designated.

SOUTHERN EUROPE, NORTH AFRICA, SYRIA, TURKESTAN.

The following records probably refer to some of the forms listed below: TRANSVAAL: Johannesburg (Dixey and Longstaff). CAPE PROVINCE: Nahoon River (Dixey and Longstaff).

60a. Subsp. *natalensis* (FOREL).*Crematogaster sordidula* subsp. *natalensis* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 431 (♀, ♀, ♂); 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 239 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 539 (♀, ♀, ♂).*Crematogaster sordidula* var. *natalensis* "Forel" MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 14 (without description).

Type locality: Mountains of NATAL (R. C. Wroughton).

BASUTOLAND: (R. C. Wroughton). NATAL: Estcourt (R. C. Wroughton);

Krantz Kloof (Marley). ORANGE FREE STATE: Bothaville (H. Brauns).

60a. Var. **braunsi** (FOREL).

*Cremastogaster sordidula* subsp. *natalensis* var. *braunsi* FOREL, 1911, Rev. Zool. Afr., I, p. 277 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 539 (♀).

*Cremastogaster braunsi* "Mayr" FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 432 (♀) (without description; this was never described by Mayr).

Type locality: Cape of Good Hope.

NATAL: in the mountains; Estcourt (R. C. Wroughton).

60b. Subsp. **rectinota** (FOREL).

*Cremastogaster sordidula* subsp. *rectinota* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 126 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 93 (♂, ♀).

*Cremastogaster sordidula* var. *rectinota* ARNOLD, 1920, Ann. South African Mus., XIV, pp. 486 and 537 (♂, ♀), Pl. VI, fig. 73.

Type locality: Bulawayo, RHODESIA (G. Arnold).

BRITISH EAST AFRICA: River Ramisi (Alluaud and Jeannel). GERMAN EAST AFRICA: Tanga (Alluaud and Jeannel).

61. **Crematogaster (Orthocrema) transvaalensis** (FOREL).

*Cremastogaster transvaalensis* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 96 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 486 and 533 (♀).

*Crematogaster transvaalensis* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 30 (♀), Pl. II, fig. 18.

Type locality: TRANSVAAL (P. Berthoud).

CAPE PROVINCE: Cape Town; Vrijburg (E. Simon).

61. Var. **hammi** (ARNOLD).

*Cremastogaster transvaalensis* var. *hammi* ARNOLD, 1920, Ann. South African Mus., XIV, p. 534, fig. 48 (♀).

Type locality: not indicated; probably in RHODESIA (G. Arnold).

#### Subgenus 4. **Atopogyne** FOREL

*Cremastogaster* subg. *Atopogyne* FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 343.

*Cremastogaster* subg. *Atopogynes* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 183.

Subgenotype: *Formica depressa* Latreille, 1802.

62. **Crematogaster (Atopogyne) africana** (MAYR).

*Cremastogaster africana* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 142 (♀); 1902, Verh. Zool. Bot. Ges. Wien, LII, p. 294 (♀). FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, pp. 53 and 69 (♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 378. FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 433. WASMANN, 1918, Ent. Mitt. Deutsch. Ent. Mus. Berlin, VII, p. 145.

*Crematogaster africana* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 480, fig. (♀). H. KOHL, 1909, Natur u. Offenbarung, LV, pp. 164 and 168.

*Cremastogaster buchneri* subsp. *africana* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 352 (♀).

*Cremastogaster (Atopogynes) africana* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 183.

Type locality: Warship harbor in CAMEROON (H. Brauns).

GOLD COAST: Aburi (R. Buchholz). NIGERIA: Old Calabar. CAMEROON: Duala (v. Rothkirch). FRENCH CONGO: Brazzaville; Mindouli (A. Weiss). BELGIAN CONGO: (Kohl); Mayombe (Cabra; de Briey); Kondué (Luja).

62<sub>1</sub>. Var. **biemarginata** (FOREL).

*Cremastogaster africana* var. *biemarginata* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 433 (♀).

Type locality: CAMEROON.

62<sub>2</sub>. Var. **camena** (FOREL).

*Cremastogaster buchneri* subsp. *africana* var. *camena* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 410 (♀).

Type locality: Olombo, BELGIAN CONGO (Kohl).

62<sub>3</sub>. Var. **schumanni** (MAYR). See p. 157.

*Cremastogaster buchneri* subsp. *schumanni* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 144 (♀).

Type locality: CAMEROON (C. Schumann).

BELGIAN CONGO: Leopoldville (J. Bequaert).

62<sub>4</sub>. Var. **stanleyi** (SANTSCHI).

*Cremastogaster buchneri* subsp. *africana* var. *stanleyi* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 253 (♀).

*Cremastogaster africana* var. *stanleyi* FOREL, 1911, Rev. Zool. Afr., I, p. 278 (♀; without description).

Type locality: Mindouli, FRENCH CONGO (A. Weiss).

BELGIAN CONGO: Kondué (Luja).

62<sub>5</sub>. Var. **variegata** (MAYR).

*Cremastogaster africana* var. *variegata* MAYR, 1902, Verh. Zool. Bot. Ges. Wien, LII, p. 294 (♀).

Type locality: Victoria, CAMEROON (R. Buchholz).

62<sub>a</sub>. Subsp. **alligatrix** (FOREL).

*Cremastogaster buchneri* subsp. *alligatrix* FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 271 (♀); 1911, Rev. Zool. Afr., I, p. 278 (♀); 1913, *ibid.*, II, p. 352 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 351 (♀); 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 338 (♀). LAMBORN, 1914, Trans. Ent. Soc. London, (1913), p. 442 (♀). FARQUHARSON, 1919, *ibid.*, (1918), Proc., p. xl.

Type locality: Old Calabar, NIGERIA (Bates).

SOUTHERN NIGERIA: Oni Camp, east of Lagos (Lamborn). BELGIAN CONGO: St. Gabriel (Kohl); Kondué (Luja); Mayombe (De Briey).

62<sub>b</sub>. Subsp. **laurenti** (FOREL) SANTSCHI *in litt.* See p. 157.

*Cremastogaster africana* subsp. *laurenti* FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 69 (♀).

*Cremastogaster africana* subsp. *laurentii* H. KOHL, 1909, Natur u. Offenbarung, LV, pp. 160, 164, and 168.

*Cremastogaster buchneri* subsp. *laurenti* FOREL, 1913, Rev. Zool. Afr., II, p. 352 (♀). LAMBORN, 1914, Trans. Ent. Soc. London, (1913), p. 442 (♀).

Type locality: Bokala, BELGIAN CONGO (Laurent).

SOUTHERN NIGERIA: Oni Camp east of Lagos (Lamborn). BELGIAN CONGO: Isangi; Stanleyville (Laurent); Tshopo River near Stanleyville (J. Bequaert).

62<sub>b1</sub>. Var. **zeta** (FOREL). See p. 157.

*Cremastogaster africana* subsp. *laurenti* var. *zeta* FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 70 (♀).

Type locality: BELGIAN CONGO (Laurent; Kohl).

BELGIAN CONGO: Pale (Niembo) between Walikale and Lubutu; Leopoldville (J. Bequaert); Stanleyville (Lang and Chapin).

62c. Subsp. *tibialis* SANTSCHI. See p. 157 (♀).

Type locality: Mosekowa between Walikale and Lubutu, BELGIAN CONGO (J. Bequaert).

62d. Subsp. *winkleri* (FOREL).

*Cremastogaster africana* var. *winkleri* FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 69 (♀); 1911, Sitzb. Bayer. Akad. Wiss., p. 272 (♀); 1911, Rev. Zool. Afr., I, p. 278 (♀). AULMANN and LA BAUME, 1912, 'Fauna d. Deutsch. Kolon.', V, 3, p. 63, fig. 36 (nest). AULMANN, 1913, *ibid.*, V, 5, p. 93, fig. 79 (nest).

*Cremastogaster buchneri* subsp. *winkleri* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 124 (♀, ♀); 1913, Rev. Zool. Afr., II, pp. 324 and 352 (♀); 1913, Rev. Suisse Zool., XXI, p. 670. LAMBORN, 1914, Trans. Ent. Soc. London, (1913), p. 442 (♀). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 409 (♀).

*Cremastogaster africana* var. *winkleri* L. REH, 1905, Zeitschr. f. Pflanzenkrankh., XV, p. 134 (without description).

Type locality: Victoria, CAMEROON (H. Winkler).

NIGERIA: Oni Camp east of Lagos (Lamborn); Old Calabar (Bates). CAMEROON: Johann-Albrechtshöhe (Conradt). BELGIAN CONGO: Olombo (Kohl); Eala; Bokala (Laurent); Kondué (Luja). RHODESIA: (G. Arnold).

62d<sub>1</sub>. Var. *brieyi* (FOREL).

*Cremastogaster buchneri* subsp. *winkleri* var. *brieyi* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 352 (♀).

Type locality: Mayombe, BELGIAN CONGO (de Briey).

62d<sub>2</sub>. Var. *fickendeyi* (FOREL). See p. 158.

*Cremastogaster buchneri* subsp. *winkleri* var. *fickendeyi* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, pp. 125 and 351 (♀); 1913, Rev. Zool. Afr., II, p. 324; 1916, Rev. Suisse Zool., XXIV, p. 409 (♀).

Type locality: Victoria, CAMEROON (Fickendey).

BELGIAN CONGO: Kondué (Luja); Leopoldville; St. Gabriel (Kohl); Masongo between Walikale and Lubutu (J. Bequaert).

62d<sub>3</sub>. Var. *transversiruginota* (FOREL).

*Cremastogaster buchneri* subsp. *winkleri* var. *transversiruginota* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 410 (♀).

Type locality: Motombe, Okiavo River, BELGIAN CONGO (Kohl).

63. *Crematogaster (Atopogyne) angusticeps* (SANTSCHI).

*Cremastogaster angusticeps* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXIX, p. 354, fig. (♀).

Type locality: Sikasso, FRENCH SUDAN (Chevalier).

64. *Crematogaster (Atopogyne) batesi* (FOREL).

*Cremastogaster batesi* FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 270 (♀).

Type locality: Old Calabar, NIGERIA (Bates).

65. *Crematogaster (Atopogyne) buchneri* (FOREL).

*Cremastogaster buchneri* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 94 (♀). MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 138 (♀). FOREL, 1913, Rev. Suisse Zool., XXI, p. 669 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 487 and 520 (♀).

*Crematogaster buchneri* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 479, fig. (♂, ♀).

*Crematogaster* (*Atopogynes*) *buchneri* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 183.

Type locality: BENGUELA (M. Buchner).

CAMEROON: (Conradt). ANGOLA.

651. Var. *biimpressa* (MAYR).

*Crematogaster buchneri* subsp. *biimpressa* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 139 (♂).

Type locality: Kuilu River, FRENCH CONGO.

652. Var. *græteri* (FOREL).

*Crematogaster buchneri* var. *græteri* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 409 (♂).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

65a. Subsp. *clariventris* (MAYR).

*Crematogaster buchneri* subsp. *clariventris* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 139 (♂); 1896, Ent. Tidskr., XVII, p. 242 (♂). FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 271 (♀); 1912, Mitt. Naturh. Mus. Hamburg, XXIX, p. 180; 1913, Ann. Soc. Ent. Belgique, LVII, p. 351 (♂); 1913, Rev. Zool. Afr., II, p. 352 (♂). LAMBORN, 1914, Trans. Ent. Soc. London, (1913), p. 442 (♂).

Type locality: Loango Coast, FRENCH CONGO (H. Brauns).

LIBERIA: (Scherer). SOUTHERN NIGERIA: Oni Camp east of Lagos (Lamborn). CAMEROON: (Sjöstedt). BELGIAN CONGO: Kondué (Luja). UGANDA: Entebbe (Schultze).

66. *Crematogaster* (*Atopogyne*) *bulawayensis* (FOREL).

*Crematogaster buchneri* subsp. *africana* var. *bulawayensis* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 125 (♂).

*Crematogaster gallicola* var. *oraclum* FOREL, 1913, Rev. Zool. Afr., II, p. 323 (♂). BEQUAERT, *ibid.*, p. 425. FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 124 (♂); 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 237 (♂). (Synonym of *bulawayensis*, *teste* Arnold).

*Crematogaster bulawayensis* ARNOLD, 1920, Ann. South African Mus., XIV, p. 521, fig. 42 (♂), Pl. VI, figs. 74 and 74a.

Type locality: Bulawayo, RHODESIA (G. Arnold).

BELGIAN CONGO: Sankisia (J. Bequaert).

661. Var. *desperans* (FOREL).

*Crematogaster gabonensis* var. *desperans* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 233 (♂).

*Crematogaster desperans* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 185.

*Crematogaster bulawayensis* var. *desperans* ARNOLD, 1920, Ann. South African Mus., XIV, p. 523, fig. 44 (♂).

Type locality: Durban, NATAL (G. Arnold).

662. Var. *rhodesiana* (FOREL).

*Crematogaster inermis* subsp. *delagoensis* var. *rhodesiana* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 126 (♂).

*Crematogaster bulawayensis* var. *rhodesiana* ARNOLD, 1920, Ann. South African Mus., XIV, p. 523, fig. 43 (♂), Pl. VI, figs. 82 and 82a.

Type locality: Bulawayo, RHODESIA (G. Arnold).

66a. Var. **zulu** (SANTSCHI).

*Cremastogaster sjostedti* subsp. *bulawayensis* var. *zulu* SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 15 (♀, ♀).

Type locality: Mfongosi, ZULULAND (W. E. Tones).

66a. Subsp. **infaceta** SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 498 (♀).

*Cremastogaster vulcanica* var. FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 124 (♀).

*Cremastogaster vulcania* subsp. *godefreyi* var. *foraminicipoides* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 406 (♀).

*Cremastogaster sjostedti* subsp. *infaceta* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 184.

*Cremastogaster godfreyi* var. *foraminicipoides* ARNOLD, 1920, Ann. South African Mus., XIV, p. 505 (♀).

*Cremastogaster bulawayensis* subsp. *infaceta* ARNOLD, *ibid.*, 1920, XIV, p. 524 (♀).

Type locality: Victoria Falls, RHODESIA (G. Arnold).

RHODESIA: Bulawayo (G. Arnold).

66a<sub>1</sub>. Var. **pudica** SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 499 (♀).

*Cremastogaster bulawayensis* subsp. *infaceta* var. *pudica* ARNOLD, 1920, Ann. South African Mus., XIV, p. 525 (♀).

Type locality: Victoria Falls, RHODESIA (G. Arnold).

67. **Crematogaster (Atopogyne) depressa** (LATREILLE).

*Formica depressa* LATREILLE, 1802, 'Hist. Nat. Fourmis,' p. 268 (♀), Pl. XI, fig. 73. ROGER, 1863, 'Verzeich. Formicid.,' p. 33. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 414.

*Formica platygnatha* ROGER, 1863, Berlin. Ent. Zeitschr., VII, p. 168 (♀); 1863, 'Verzeich. Formicid.,' p. 15. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 419.

*Cremastogaster mandibularis* ERN. ANDRÉ, 1889, Rev. d'Ent. Caen, VIII, p. 229 (♀).

*Cremastogaster platygnatha* ERN. ANDRÉ, 1890, *ibid.*, IX, p. 323 (♀).

*Crematogaster depressa* EMERY, 1892, Bull. Soc. Ent. Italiana, XXIII, p. 164; 1899, Ann. Soc. Ent. Belgique, XLIII, p. 478, fig. (♀).

*Cremastogaster depressa* DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 81. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 144. FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 5 (♀, ♂).

*Cremastogaster buchneri* subsp. *foreli* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 138 (♀). FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 53 (♀).

*Cremastogaster (Atopogyne) depressa* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 351 (♀); 1918, Bull. Soc. Ent. France, p. 183.

*Cremastogaster (Atopogyne) depressa* subsp. *foreli* SANTSCHI, 1914, Boll. Lab. Gen. Agrar. Portici, VIII, p. 351 (♀).

Type locality: Coast of GUINEA (Palisot de Beauvois).

WEST AFRICA: (Fülleborn). SENEGAMBIA. FRENCH GUINEA: Los Islands. SIERRA LEONE: (Mocquerys). GOLD COAST. SLAVE COAST. SOUTHERN NIGERIA: Lagos; Olokemeji; Ibadan (F. Silvestri); Old Calabar (H. Brauns). CAMEROON: Victoria. BELGIAN CONGO: Luki (A. Jullien).

671. **Var. adultera** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 252 (♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

672. **Var. fuscipennis** EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 479 (♀). See p. 159.

*Crematogaster depressa* var. *fuscipennis* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 380, figs. 8b-c and 9a-c (♀, ♀, ♀ ergatom.). FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 53 (♀, ♂); 1911, Rev. Zool. Afr., I, p. 279 (♀); 1913, ibid., II, p. 325 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 353 (♀).

Type locality: CAMEROON.

FRENCH CONGO: Gomba region (A. Weiss). BELGIAN CONGO: Kinshasa; Boyengue; Ikelemba (Waelbroeck); Leopoldville (Dubois; J. Bequaert); Sankisia (J. Bequaert); Mayombe (Deleval); Stanleyville; Medje; Niapu; Ambelokudi; Niangara (Lang and Chapin).

68. **Crematogaster (Atopogyne) gabonensis** EMERY.

*Crematogaster gabonensis* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 484 (♀).

*Crematogaster gabonensis* SANTSCHI, 1911, ibid., LV, p. 281 (♂). FOREL, 1913, ibid., LVII, p. 126 (♀).

Type locality: Gaboon, FRENCH CONGO.

IVORY COAST: (Lohier). CAMEROON: Victoria (Fickendey).

681. **Var. fuscitatis** (FOREL).

*Crematogaster gabonensis* var. *fuscitatis* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 351 (♀).

Type locality: Kondué, BELGIAN CONGO (Luja).

BELGIAN CONGO: Congo da Lemba (R. Mayné).

69. **Crematogaster (Atopogyne) homeri** (FOREL).

*Crematogaster (Atopogyne) homeri* FOREL, 1913, Rev. Suisse Zool., XXI, p. 668 (♀).

Type locality: Johann-Albrechtshöhe, CAMEROON (Conradt).

70. **Crematogaster (Atopogyne) jullieni** (SANTSCHI).

*Crematogaster jullieni* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 378, figs. 8a and 8d (♀, ♀). FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 5 (♀).

*Crematogaster (Atopogyne) jullieni* FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 343.

*Crematogaster (Atopogyne) jullieni* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 183.

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

WEST AFRICA: (Fülleborn). FRENCH CONGO: Gaboon.

71. **Crematogaster (Atopogyne) kasaiensis** (FOREL).

*Crematogaster kasaiensis* FOREL, 1913, Rev. Zool. Afr., II, p. 321 (♀, ♀); 1916, Rev. Suisse Zool., XXIV, p. 407 (♀, ♀).

Type locality: Kondué, BELGIAN CONGO (Luja).

BELGIAN CONGO: St. Gabriel (Kohl).

72. **Crematogaster (Atopogyne) kohli** (FOREL).

*Crematogaster kohli* FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, pp. 70 and 71 (♀); 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 340 (♀, ♀).

Type locality: Stanleyville, BELGIAN CONGO (Kohl).

BELGIAN CONGO: Romée near Stanleyville (Luja); St. Gabriel (Kohl).

73. ***Crematogaster (Atopogyne) theta*** (FOREL) SANTSCHI *in litt.* See p. 159.

*Crematogaster africana* var. *theta* FOREL, 1911, Rev. Zool. Afr., I, p. 278 (♀).

*Crematogaster buchneri* subsp. *laurenti* var. *theta* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, pp. 125 and 352 (♂); 1913, Rev. Zool. Afr., II, p. 325; 1916, Rev. Suisse Zool., XXIV, p. 410 (♀, ♀).

Type locality: Kondué, BELGIAN CONGO (Luja).

BELGIAN CONGO: St. Gabriel (Kohl); Medje; Avakubi; Stanleyville (Lang and Chapin).

74. ***Crematogaster (Atopogyne) transiens*** (FOREL) SANTSCHI *in litt.* See p. 160.

*Crematogaster buchneri* subsp. *transiens* FOREL, 1913, Rev. Zool. Afr., II, p. 324 (♀). BEQUAERT, *ibid.*, p. 426. SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 253.

Type locality: Kana near Kikondja, BELGIAN CONGO (J. Bequaert).

BELGIAN CONGO: Katakai (Gérard); Avakubi; Stanleyville (Lang and Chapin).

75. ***Crematogaster (Atopogyne) wasmanni*** (SANTSCHI).

*Crematogaster wasmanni* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXXVIII, (1909), p. 376, fig. 7 (♀).

*Crematogaster (Atopogynes) wasmanni* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 183.

Type locality: Sankuru, BELGIAN CONGO (Luja).

76. ***Crematogaster (Atopogyne) wellmani*** (FOREL).

*Crematogaster wellmani* FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 64 (♀; nec ♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 376 (♀). FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 433 (♀).

*Crematogaster (Atopogynes?) wellmani* SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 500 (♀).

Type locality: BENGUELA (C. Wellman).

NIGERIA: Old Calabar. FRENCH CONGO: Brazzaville (A. Weiss); Libreville.

76<sub>1</sub>. Var. *luciae* (FOREL).

*Crematogaster concava* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 480 (♀) (nec ♀; nec *concava* André).

*Crematogaster (Atopogyne) luciae* FOREL, 1913, Rev. Zool. Afr., II, p. 325 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 353 (♀); 1913, Rev. Suisse Zool., XXI, p. 668 (♀); 1916, *ibid.*, XXIV, p. 411 (♀).

*Crematogaster (Atopogynes?) wellmani* var. *luciae* SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 500 (♀).

Type locality: SIERRA LEONE.

CAMEROON: (Conradt). BELGIAN CONGO: (Kohl); Kwesi to Kilo (Bayer).

76<sub>2</sub>. Var. *weissi* SANTSCHI.

*Crematogaster wellmani* var. *weissi* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 376 (♀).

*Crematogaster wellmani* var. *weissi* SANTSCHI, 1916, *ibid.*, LXXXIV, (1915), p. 500 (♀).

Type locality: Gomba, FRENCH CONGO (A. Weiss).



76a. Subsp. **retusa** SANTSCHI.

*Crematogaster welmani* subsp. *retusa* SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 500 (♀, ♀, ♂).

*Crematogaster* (*Atopogyne*) *welmani* subsp. *retusa* ARNOLD, 1920, Ann. South African Mus., XIV, pp. 486 and 545, fig. 54 (♀, ♀, ♂).

Type locality: Victoria Falls, RHODESIA (G. Arnold).

Subgenus 5. **Oxygyne** FOREL

*Crematogaster* subg. *Oxygyne* FOREL, 1901, Ann. Soc. Ent. Belgique, XLV, p. 376.

*Crematogaster* subg. *Oxygyne* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 183.

Subgenotype: *Crematogaster* (*Oxygyne*) *daisyi* Forel, 1901.

77. **Crematogaster** (**Oxygyne**) **magitæ** (FOREL).

*Crematogaster* (*Oxygyne*?) *magitæ* FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 9 (♀); 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 369.

Type locality: West Africa (Fülleborn).

78. **Crematogaster** (**Oxygyne**) **margaritæ** EMERY.

*Crematogaster margaritæ* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 31 (♀).

*Crematogaster margaritæ* MAYR, 1896, Ent. Tidskr., XVII, p. 243 (♀, ♀, ♂).  
AURIVILLIUS, ibid., p. 254, Pl. IV, fig. 2 (nest). Sjöstedt, 1904, 'I Västafrikas Urskogar,' p. 504, fig. 2 (nest).

*Crematogaster* (*Oxygyne*) *margaritæ* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 381, fig. 8c (♀).

Type locality: Kuilu, FRENCH CONGO.

CAMEROON: (Sjöstedt). FRENCH CONGO: Brazzaville (A. Weiss).

78a. Subsp. **lujæ** (FOREL).

*Crematogaster* (*Oxygyne*) *margaritæ* subsp. *lujæ* FOREL, 1913, Rev. Zool. Afr., II, p. 325 (♀).

Type locality: Kondué, BELGIAN CONGO (Luja).

79. **Crematogaster** (**Oxygyne**) **oscaris** (FOREL).

*Crematogaster* (*Oxygyne*) *oscaris* FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 7 (♀, ♀, ♂), Pl. I, figs. 5 and 6. ARNOLD, 1920, Ann. South African Mus., XIV, p. 543 (♀, ♀, ♂).

Type locality: Kamaggas, CAPE PROVINCE (L. Schultze).

80. **Crematogaster** (**Oxygyne**) **santschii** (FOREL).

*Crematogaster santschii*, FOREL, 1913, Rev. Zool. Afr., II, p. 322 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 352 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 487 (♀).

Type locality: Kondué, BELGIAN CONGO (Luja).

BELGIAN CONGO: Congo da Lemba (R. Mayné).

80<sub>1</sub>. Var. **brevarmata** (FOREL).

*Crematogaster santschii* var. *brevarmata* FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 337 (♀, ♂).

Type locality: Kondué, BELGIAN CONGO (Luja).

80<sub>2</sub>. Var. **clymene** (FOREL).

*Crematogaster santschii* var. *clymene* FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 337 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 540, fig. 52 (♀).

Type locality: Durban, NATAL (C. B. Cooper).

81. **Crematogaster (Oxygyne) trautweini** (VIEHMEYER).

*Crematogaster (Oxygyne) trautweini* VIEHMEYER, 1914, Arch. f. Naturg., LXXIX, Abt. A, Heft 12, (1913), p. 33 (♀).

Type locality: CAMEROON (H. Trautwein).

Subgenus 6. **Nematocrema** SANTSCHI

*Crematogaster* subg. *Nematocrema* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 182.

Subgenotype: *Crematogaster stadelmanni* Mayr, 1895.

82. **Crematogaster (Nematocrema) breviventris** (SANTSCHI).

*Crematogaster (Nematocrema) breviventris* SANTSCHI, 1920, Ann. Soc. Ent. France, LXXXVIII, (1919), p. 379 (♀).

Type locality: Molundu, CAMEROON (Reichensperger).

83. **Crematogaster (Nematocrema) stadelmanni** (MAYR). See p. 160.

*Crematogaster stadelmanni* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 140 (♀, ♀); 1902, Verh. Zool. Bot. Ges. Wien, LII, p. 294 (♀). DIXEY and LONGSTAFF, 1907, Trans. Ent. Soc. London, p. 380. FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 369 (♀).

*Crematogaster (Oxygyne) stadelmanni* FOREL, 1911, Rev. Zool. Afr., I, p. 277 (♀); 1913, Rev. Suisse Zool., XXI, p. 670 (♀); 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 337 (♀); 1916, Rev. Suisse Zool., XXIV, p. 411 (♀).

*Crematogaster (Oxygyne) stadelmanni* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 349 (♀).

*Crematogaster (Nematocrema) stadelmanni* SANTSCHI, 1918, Bull. Soc. Ent. France, p. 182.

Type locality: LIBERIA.

FRENCH GUINEA: Konakry (F. Silvestri). CAMEROON: (Conradt); Victoria (R. Buchholz). BELGIAN CONGO: Congo da Lemba (Mayné); St. Gabriel (Kohl); Stanleyville (Lang and Chapin). BRITISH EAST AFRICA: Victoria Nyanza (Zimmer). CAPE PROVINCE: Simon's Town (E. Simon).

83<sub>1</sub>. Var. **anguliceps** (STITZ).

*Crematogaster (Oxygyne) stadelmanni* var. *anguliceps* STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 384, fig. 4b (♀).

Type locality: Ossidinge, CAMEROON.

83<sub>2</sub>. Var. **angustata** (MAYR).

*Crematogaster stadelmanni* var. *angustata* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 142 (♀).

Type locality: CAMEROON (H. Brauns).

83<sub>3</sub>. Var. **dolichocephala** (SANTSCHI). See p. 160.

*Crematogaster stadelmanni* var. *dolichocephala* SANTSCHI, 1911, Rev. Zool. Afr., I, p. 208, with description (♀, ♀, ♂); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 349, with description (♀). FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 337 (♀).

*Crematogaster stadelmanni* subsp. *dolichocephala* "Emery in litt." SANTSCHI, 1910, Ann. Soc. Ent. France, LXXXVIII, (1909), p. 378 (without description). WASMANN, 1911, '1<sup>er</sup> Congr. Intern. Entom. Bruxelles (1910),' II, Mém., p. 231, Pl. xvi, fig. 32 (nest); 1913, Ann. Rept. Smiths. Inst. for 1912, p. 472, Pl. x, fig. 32 (nest).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

NIGERIA: Ibadan (F. Silvestri). FRENCH CONGO: Mindouli; Gomba (A. Weiss). BELGIAN CONGO: St. Gabriel (Kohl); Bengamisa; Manamana; Kwamouth; Ngayu (Lang and Chapin); Kondué (Luja).

834. Var. **intermedia** (MAYR).

*Cremastogaster stadelmanni* var. *intermedia* MAYR, 1896, Ent. Tidskr., XVII, p. 242 (♂, ♀). AURIVILLIUS, *ibid.*, p. 254, Pl. v (nest). SJÖSTEDT, 1904, 'I Västafrikas Urskogar,' pp. 502 and 503, fig. (nest).

Type locality: CAMEROON (Sjöstedt).

835. Var. **ovinodis** (STITZ).

*Cremastogaster (Oxygyne) stadelmanni* var. *ovinodis* STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 383, fig. 4d (♀).

Type locality: Duma, BELGIAN CONGO (Schubotz).

836. Var. **scheneri** (FOREL).

*Cremastogaster stadelmanni* var. *scheneri* FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 273 (♀).

Type locality: Bendov, LIBERIA (Scherer).

#### Subgenus 7. **Decacrema** FOREL

*Cremastogaster* subg. *Decacrema* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 18; in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 9.

Subgenotype: *Cremastogaster (Decacrema) decamera* Forel, 1910.

84. **Crematogaster (Decacrema) arthuri-mülleri** (FOREL).

*Cremastogaster gallicola* subsp. *arthuri-mülleri* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 96 (♀).

*Cremastogaster arthuri-mülleri* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 144 (♀).

*Cremastogaster (Decracrema) arthur-mülleri* ARNOLD, 1920, Ann. South African Mus., XIV, p. 547 (♀).

Type locality: DELAGOA (Arthur Müller).

East Africa.

85. **Crematogaster (Decacrema) edentula** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 253 (♀).

*Cremastogaster (Decacrema) edentula* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 349, figs. 18a-b (♀, ♀).

Type locality: Kindia, FRENCH GUINEA (F. Silvestri).

DAHOMY: Kouandé (Desanti).

86. **Crematogaster (Decacrema) liengmei** (FOREL).

*Cremastogaster gallicola* var. *liengmei* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 96 (♀).

*Cremastogaster lieugmei* WASMANN, 1898, Wien. Ent. Zeitg., XVII, p. 97.

*Cremastogaster (Decacrema) liegmei* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 436 (♀). SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 21 (♀).

*Cremastogaster liengmei* REICHENSFELGER, 1915, Med. Göteborgs Mus. Zool. Afd., V, p. 6.

*Cremastogaster (Decracrema) liengmei* ARNOLD, 1920, Ann. South African Mus., XIV, p. 548 (♀).

Type locality: DELAGOA (Liengme).

NATAL: (L. v. Muralt); Balgowan (I. Trägårdh).

86a. Subsp. **caculata** (FOREL).

*Cremastogaster peringueyi* subsp. *caculata* FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 341 (♀).

*Cremastogaster liengmei* subsp. *caculata* ARNOLD, 1920, Ann. South African Mus., XIV, p. 550 (♀).

Type locality: Durban, NATAL (C. B. Cooper).

86b. Subsp. **weitzackeri** (EMERY).

*Cremastogaster weitzackeri* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 28 (♀), Pl. II, figs. 14 and 15.

*Cremastogaster (Decacrema) liengmei* var. *weitzackeri* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 21 (♀).

*Cremastogaster weitzackeri* DIXEY and LONGSTAFF, 1907, Trans. Ent. Soc. London, p. 371.

*Cremastogaster excisa* subsp. *andrei* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 236 (♀, according to Arnold, with 10-jointed antennæ).

*Cremastogaster caelestis* var. *kloofensis* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 237 (♀, teste Arnold).

*Cremastogaster (Decacrema) liengmei* subsp. *weitzackeri* ARNOLD, 1920, Ann. South African Mus., XIV, p. 548, fig. 55 (♀).

Type locality: Pietermaritzburg, NATAL (Weitzacker; I. Trägårdh).

NATAL: Estcourt (R. C. Wroughton); Krantz Kloof, Durban (Marley). CAPE PROVINCE: Cape Town (E. Simon); Nahoon River (Dixey and Longstaff).

86b<sub>1</sub>. Var. **acanthobia** (FOREL).

*Cremastogaster excisa* subsp. *andrei* var. *acanthobia* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 236 (♀).

*Cremastogaster excisa* subsp. *andrei* var. *pensitata* FOREL, 1915, *ibid.*, (5) L, p. 341 (♀).

*Cremastogaster liengmei* subsp. *weitzackeri* var. *acanthobia* ARNOLD, 1920, Ann. South African Mus., XIV, p. 550 (♀).

Type locality: Willowmore, CAPE COLONY (Arnold).

86b<sub>2</sub>. Var. **gordonensis** (FOREL).

*Cremastogaster excisa* subsp. *andrei* var. *gordonensis* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 236 (♀).

*Cremastogaster liengmei* subsp. *weitzackeri* var. *gordonensis* ARNOLD, 1920, Ann. South African Mus., XIV, p. 549 (♀).

Type locality: Gordon Bay, CAPE PROVINCE.

86b<sub>3</sub>. Var. **thais** (FOREL).

*Cremastogaster excisa* subsp. *andrei* var. *thais* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 126 (♀).

*Cremastogaster liengmei* subsp. *weitzackeri* var. *thais* ARNOLD, 1920, Ann. South African Mus., XIV, p. 549 (♀).

Type locality: Port Elizabeth, CAPE PROVINCE (H. Brauns).

CAPE PROVINCE: Grahamstown (Sherry).

87. ***Crematogaster (Decacrema) petiolidens*** (FOREL).

*Cremastogaster (Decacrema) petiolidens* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 412 (♀).

Type locality: BELGIAN CONGO (Kohl).

88. **Crematogaster (Decacrema) solenopsides** EMERY.

*Crematogaster solenopsides* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 487 (♀).

Type locality: ZANZIBAR.

88a. Subsp. **costeboriensis** (SANTSCHI).

*Crematogaster (Decacrema) solenopsoides* subsp. *costeboriensis* SANTSCHI, 1919, Rev. Zool. Afr., VII, p. 86 (♀).

Type locality: Region of San Pedro, IVORY COAST (C. Phore).

88b. Subsp. **flavida** (MAYR).

*Crematogaster solenopsides* subsp. *flavida* MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 15 (♀).

*Crematogaster solenopsides* var. *flavida* SJÖSTEDT, 1908, *ibid.*, II, 8, p. 117.

Type locality: Same to Moëmbe, Usambara, GERMAN EAST AFRICA (Sjöstedt).

88b<sub>1</sub>. Var. **convexiclypea** (FOREL).

*Crematogaster (Decacrema) solenopsoides* subsp. *flavida* var. *convexiclypea* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 411 (♀, ♀, ♂).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

88b<sub>2</sub>. Var. **flaviscapis** (SANTSCHI).

*Crematogaster solenopsoides* subsp. *flavida* var. *flaviscapis* SANTSCHI, 1919, Rev. Zool. Afr., VII, p. 85 (♀).

Type locality: Landana, PORTUGUESE CONGO (J. Bequaert).

88b<sub>3</sub>. Var. **gallarum** (SANTSCHI).

*Crematogaster solenopsides* subsp. *flavida* var. *gallarum* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 370 (♀).

*Crematogaster solenopsoides* subsp. *flavida* var. *gallarum* SANTSCHI, 1919, Rev. Zool. Afr., VII, p. 86.

Type locality: Mindouli, FRENCH CONGO (A. Weiss).

FRENCH CONGO: Mbamu (A. Weiss).

**Solenopsidini** Emery**Monomorium** MAYR

*Monomorium* MAYR, 1855, Verh. Zool. Bot. Ges. Wien, V, p. 452.

*Atta* (part) JERDON. *Formica* (part) LINNÆUS, *et auct.* *Myrmica* (part) SMITH, *et auct.*

Genotype: *Monomorium minutum* Mayr, 1855.

Subgenus 1. **Monomorium** MAYR, *sensu stricto*

Subgenotype: same as genotype.

1. **Monomorium altinode** SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 18.

*Monomorium rhopalocerum* var. *altinodis* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 359, fig. 4b (♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

1<sub>1</sub>. Var. **bondroiti** SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 10, fig. 1f (♀).

Type locality: Upper Lukuga River, BELGIAN CONGO (Gérard).

2. ***Monomorium angustinode*** FOREL, 1913, Rev. Zool. Afr., II, p. 334 (♀).  
BEQUAERT, *ibid.*, p. 428.  
Type locality: Welgelegen, BELGIAN CONGO (J. Bequaert).
3. ***Monomorium arnoldi*** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 137 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 232 (♀).  
Type locality: Matoppo Hills, SOUTHERN RHODESIA (G. Arnold).
4. ***Monomorium braunsi*** MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 7 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 234 (♀).  
Type locality: Port Elizabeth, CAPE PROVINCE (H. Brauns).
41. Var. ***shilohense*** FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 217 (♀).  
ARNOLD, 1916, Ann. South African Mus., XIV, p. 235 (♀).  
Type locality: Shiloh, SOUTHERN RHODESIA (G. Arnold).
5. ***Monomorium egens*** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 443 (♀).  
Type locality: CAMEROON (v. Muralt).
6. ***Monomorium emeryi*** MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 132 (♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 136 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 212 (♀, ♀, ♂), Pl. v, fig. 62.  
Type locality: Mozambique Island, PORTUGUESE EAST AFRICA (H. Brauns).  
RHODESIA: Redbank; Nyamandhloru (G. Arnold).
7. ***Monomorium explorator*** SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 12, fig. 1a-b (♀).  
Type locality: Samkita, FRENCH CONGO (F. Faure).
8. ***Monomorium fasciatum*** SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 10, fig. 1c-e (♀).  
Type locality: Kilimanjaro, GERMAN EAST AFRICA (Reichensperger).
9. ***Monomorium floricola*** (JERDON) EMERY, in Dalla Torre, 1893, 'Cat. Hym.', VII, p. 66. SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 354 (♀, ♀). See p. 1026.  
*Atta floricola* JERDON, 1851, Madras Journ. Litt. Sc., XVII, p. 107; 1854, Ann. Mag. Nat. Hist., (2) XIII, p. 49 (♀).  
*Monomorium specularis* MAYR, 1866, Sitzb. Ak. Wiss. Wien, LIII, Abt. 1, p. 509 (♀); 1878, Verh. Zool. Bot. Ges. Wien, XXVIII, p. 671.  
Type locality: Tellicherry, Southern INDIA (Jerdon):  
Tropicopolitan. SOUTHERN NIGERIA: Lagos (F. Silvestri).
10. ***Monomorium hanneli*** FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 18 (♀).  
Type locality: Mtc-ya-Kifaru, GERMAN EAST AFRICA (Katona).
11. ***Monomorium ilgi*** FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 84 (♀).  
Type locality: Southern ABYSSINIA (Ilg).
12. ***Monomorium leimbachi*** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 246 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 233 (♀).  
Type locality: Cape Town, CAPE PROVINCE (G. Arnold).
13. ***Monomorium lene*** SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 11, fig. 2g-h (♀).  
Type locality: Salisbury, SOUTHERN RHODESIA (G. Arnold).
14. ***Monomorium mediocre*** SANTSCHI, 1920, Ann. Soc. Ent. France, LXXXVIII, (1919), p. 376, fig. 13 (♀).  
Type locality: Kimberley, CAPE PROVINCE (G. Arnold).

15. **Monomorium minutum** MAYR, 1855, Verh. Zool. Bot. Ges. Wien, V, p. 453 (♀); 1861, 'Europ. Formicid., p. 72 (♀); 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 753 (♀). ROGER, 1863, 'Verzeich. Formicid.,' p. 31. MAYR, 1865, 'Reise Novara Zool.,' II, 1, Formicidæ, p. 91 (♀, ♂); 1866, Sitzb. Ak. Wiss. Wien, LIII, Abt. 1, p. 509 (♀). ERN. ANDRÉ, 1874, Rev. Mag. Zool., (3) II, p. 199; 1883, 'Spec. Hym. Europ. Algérie,' II, pp. 333, 338, and 341 (♀, ♀, ♂). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 67. SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 72 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 217 (♀). See p. 1027.

*Myrmica* (*Monomarium*) *minuta* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 129 (♀).

*Monomorium carbonarium* EMERY, 1881, Ann. Mus. Civ. Genova, XVI, p. 532 (♀).

Type locality: Lombardy, ITALY (Villa).

UGANDA: Region of Lake Albert (C. Alluaud).

151. Var. **leopoldinum** FOREL, 1905, Ann. Soc. Ent. Belgique, XLIX, p. 179 (♀).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

152. Var. **pallidipes** FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 252 (♀). SANTSCHI, 1914, 'Voy. Alluaud and Jeannel Afr. Orient., Formicidæ,' p. 72 (♀).

Type locality: Nefasit, ERITREA (K. Escherich).

BRITISH EAST AFRICA: Kikuyu, Nairobi, 1700 m. (Alluaud and Jeannel).

15a. Subsp. **boerorum** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 244 (♀, ♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 218 (♀, ♀).

*Monomorium minutum* var. *boerorum* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 442 (♀).

Type locality: ORANGE FREE STATE (R. C. Wroughton).

CAPE PROVINCE: Cape Town (L. Péringuey; Phillip).

15b. Subsp. **hottentotum** EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 26 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 218 (♀).

Type locality: Cape Town, CAPE PROVINCE (E. Simon).

15c. Subsp. **madecassum** FOREL, in Grandidier, 1892, 'Hist. Phys. Nat. Madagascar,' XX, 2, p. 255 (♀, ♀, ♂); 1907, Ann. Mus. Nat. Hungarici, V, p. 18 (♀). See p. 1027.

*Monomorium minutum* FOREL, in Grandidier, 1891, 'Hist. Phys. Nat. Madagascar,' XX, 2, p. 164 (♀, ♀, ♂).

GERMAN EAST AFRICA: Mto-ya-Kifaru (Katona).

16. **Monomorium moestum** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 74, fig. 7 (♀).

Type locality: Naivasha, Rift Valley, 1900 m., BRITISH EAST AFRICA (Alluaud and Jeannel).

17. **Monomorium opacum** FOREL, 1913, Rev. Zool. Afr., II, p. 333 (♀). BEQUAERT, *ibid.*, p. 428.

Type locality: Shinsenda, BELGIAN CONGO (J. Bequaert).

18. **Monomorium ophthalmicum** FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 87 (♀).

Type locality: Southern ABYSSINIA (Ilg).

- Monomorium oscaris** FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 86 (♀). EMERY, 1901, Bull. Soc. Ent. Italiana, XXXIII, p. 61 (♀).

Type locality: Southern ABYSSINIA (Ilg).

ERITREA: Ghinda (Belli).

- 19<sub>1</sub>. Var. **excensuræ** FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 342 (♀).

Type locality: Kentani, CAPE PROVINCE (Miss A. Pegler).

- 19<sub>2</sub>. Var. **nuptiale** FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 216 (♀).

ARNOLD, 1916, Ann. South African Mus., XIV, p. 229 (♀).

Type locality: Bembesi, RHODESIA (G. Arnold).

RHODESIA: Bulawayo (G. Arnold).

- 19<sub>a</sub>. Subsp. **musicum** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 442 (♀, ♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 230 (♀, ♀).

Type locality: NATAL (Haviland).

- 19<sub>b</sub>. Subsp. **springvalense** FOREL, 1913, Bull. Soc. Ent. Belgique, LVII, p. 136 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 230 (♀).

Type locality: Springvale, Matoppos, SOUTHERN RHODESIA (G. Arnold).

- 19<sub>b</sub><sub>1</sub>. Var. **paternum** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 248 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 231 (♀). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 418 (♀).

Type locality: Table Mt., 1800 ft., CAPE PROVINCE (G. Arnold).

BELGIAN CONGO: St. Gabriel (Kohl).

20. **Monomorium osiridis** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 258, fig. 7 (♀).

Type locality: Bura, BRITISH EAST AFRICA (Alluaud and Jeannel).

21. **Monomorium pacis** FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 343 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 234 (♀).

Type locality: Cape Town, CAPE PROVINCE.

22. **Monomorium pharaonis** (LINNÆUS) MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 752; 1863, *ibid.*, XIII, p. 429. ROGER, 1863, 'Verzeich. Formicid.,' p. 32. MAYR, 1865, 'Reise Novara, Zool.,' II, Formicidæ, p. 90 (♂); 1867, Tijdschr. v. Ent., X, p. 95 (♀, ♀, ♂). FRAUENFELD, 1867, Verh. Zool. Bot. Ges. Wien, XVII, p. 441. ERN. ANDRÉ, 1874, Rev. Mag. Zool., (3) II, p. 200. EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 368 (♀, ♀). SAUNDERS, 1880, Trans. Ent. Soc. London, p. 222 (♀, ♀, ♂). EMERY, 1881, Ann. Mus. Civ. Genova, XVI, p. 532 (♀). ERN. ANDRÉ, 1883, 'Spec. Hym. Europ. Algérie,' II, pp. 333, 338, and 342 (♀, ♀, ♂). MAGRETTI, 1884, Bull. Soc. Ent. Italiana, XV, (1883), p. 244 (♀); 1884, Ann. Mus. Civ. Genova, XXI, p. 539 (♀). REUTER, 1884, Öfvers. Finsk. Vet.-Soc. Förh., XXVI, pp. 1-21. PREUDHOMME, 1885, Ann. Soc. Ent. Belgique, XXIX, C. R., p. cxxxvii. KORLEVIC, 1886, Rovart. Lapok, III, pp. 18 and iv. FROMHOLZ, 1886, Ent. Nachr., XII, p. 122. MAYR, 1886, Verh. Zool. Bot. Ges. Wien, XXXVI, p. 359. PROVANCHER, 1887, 'Addit. Faune Ent. Canada, Hym.,' p. 249. BELLEVOYE, 1888, Ann. Soc. Ent. France, (6) VIII, Bull., p. clxxvii. RILEY, 1888, 'Insect Life,' II, p. 106, fig. 18. BELLEVOYE, 1890, *ibid.*, II, pp. 230-233. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 69. MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 201; 1895, Ann. Naturh. Hofmus. Wien, X, p. 133. EMERY, 1895, Ann. Soc. Ent. Belgique, XXXIX, p. 337. MAYR, 1896, Ent. Tidskr., XVII, p. 238. H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 40. FOREL, 1901, Mitt. Naturh. Mus. Hamburg, XVIII, p.



81 (♀). SJÖSTEDT, 1904, 'I Västafrikas Urskogar,' p. 29. MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 12; 1907, Sitzb. Ak. Wiss. Wien, math. naturw. Kl., CXVI, Abt. 1, p. 387. EMERY, 1908, Deutsch. Ent. Zeitschr., p. 684 (♀, ♀, ♂). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 145 (♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 351 (♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 354 (♀, ♀). FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 245 (♀, ♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 228 (♀, ♀, ♂). WASMANN, 1918, Ent. Mitt. Deutsch. Ent. Mus. Berlin, VII, p. 147. SANTSCHI, 1920, 'Études Maladies Parasites Cacaoyer, S. Thomé,' X, p. 2. See pp. 162 and 1027.

*Formica pharaonis* LINNÆUS, 1758, 'Syst. Nat.,' Ed. 10, I, p. 580; 1764, 'Mus. Ludov. Ulric.,' p. 418; 1767, 'Syst. Nat.,' Ed. 12, I, 2, p. 963. P. L. MÜLLER, in Linnæus, 1775, 'Vollst. Natursyst.,' V, p. 913. GMELIN, in Linnæus, 1790, 'Syst. Nat.,' Ed. 13, I, 5, p. 2799. CHRIST, 1791, 'Naturg. d. Insect.,' p. 514. OLIVIER, 1791, 'Encycl. Method. Insect.,' VI, p. 503. LATREILLE, 1802, 'Hist. Nat. Fourmis,' p. 290.

*Formica antiquensis* FABRICIUS, 1793, 'Ent. Syst.,' II, p. 357. LATREILLE, 1802, 'Hist. Nat. Fourmis,' p. 285. FABRICIUS, 1804, 'Syst. Piez.,' p. 404.

*Myrmica domestica* SHUCKARD, 1838, Mag. Nat. Hist., (2) II, p. 627 (♀, ♀). F. SMITH, 1851, 'List Brit. Anim. Brit. Mus.,' VI, Aculeat., p. 119 (♀, ♂). DANIELL, 1852, Proc. Linn. Soc. London, II, pp. 172-177. WAKEFIELD, 1853, Zoologist, XI, p. 3810. DANIELL, 1853, *ibid.*, XI, pp. 3769-3773. CURTIS, 1854, Trans. Linn. Soc. London, XXI, p. 217. F. SMITH, 1855, Trans. Ent. Soc. London, (2) III, p. 130 (♀, ♀, ♂); 1859, Zoologist, XVII, p. 6387. SHARP, 1869, Entomologist, IV, p. 232. GILLAM, 1870, *ibid.*, V, p. 83.

*Myrmica unifasciata* BOSTOCK, 1839, Trans. Ent. Soc. London, II, Proc., pp. li-iii.

*Atta minuta* JERDON, 1851, Madras Journ. Litt. Sc., XVII, p. 105; 1854, Ann. Mag. Nat. Hist., (2) XIII, p. 47 (♀, ♀).

*Myrmica (Ecophthora) domestica* NYLANDER, 1856, Ann. Sc. Nat. Zool., (4) V, p. 98 (♀, ♀, ♂), Pl. III, figs. 53, 54.

*Myrmica (Diplorhoptrum) molesta* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 122 (*nec* Say); 1858, 'Cat. Brit. Fossor. Hym.,' p. 34 (♀, ♀, ♂); 1858, Trans. Ent. Soc. London, (2) IV, p. 284.

*Myrmica (Monomarium) fragilis* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 124 (♀).

*Myrmica (Monomarium) contigua* F. SMITH, *ibid.*, p. 125 (♀).

*Myrmica (Monomarium) molesta* F. SMITH, *ibid.*, p. 130 (*nec* Say).

*Diplorhoptrum fugax* LUCAS, 1858, Ann. Soc. Ent. France, (3) VI, Bull., p. lxxxi (*nec* Mayr, *nec* auct.).

*Myrmica molesta* MEINERT, 1860, Danske Vidensk. Selsk. Skrift., naturv. math. Afd., (5) V, p. 335 (♀, ♀, ♂) (*nec* Say). F. SMITH, 1860, Journ. Proc. Linn. Soc. London, Zool., IV, Suppl., p. 73 (*nec* Say); 1862, Trans. Ent. Soc. London, (3) I, p. 33 (*nec* Say); 1863, Ent. Annual for 1863, p. 59 (*nec* Say). RILEY, 1870, Second Ann. Rep. Ins. Missouri, p. 11 (*nec* Say); 1877, Ninth Ann. Rep. Ins. Missouri, p. 43 (*nec* Say). PROVANCHER, 1881, Natural. Canadien, XII, p. 360 (♀, ♀, ♂) (*nec* Say); 1883, 'Faune Ent. Canada, Hym.,' p. 603 (♀, ♀, ♂) (*nec* Say).

*Myrmica pharaonis* ROGER, 1862, Berlin. Ent. Zeitschr., VI, p. 294 (♀, ♂).

*Diploporhtrum domesticum* GASKELL, 1877, Ent. Monthly Mag., XIII, p. 254. WHITE, 1883, 'Ants and Their Ways,' p. 268, fig. 18.

Type locality: EGYPT.

Cosmopolitan. SENEGAMBIA: Dakar (F. Silvestri). LIBERIA: Junk River. TOGO: Bismarckburg (Conradt). SAN THOMÉ: (de Seabra). CAMEROON: (Sjöstedt); Moliwe Region (v. Maltzahn); Duala (v. Rothkirch). BELGIAN CONGO: Boma (Styczinski); Stanleyville; Thysville (Lang and Chapin); Sankuru (Luja). CAPE PROVINCE: Cape Town (R. Lightfoot). NATAL: Durban (Marley). GERMAN EAST AFRICA: Tanga (Sjöstedt). ZANZIBAR: (Stuhlmann). UGANDA: Gondokoro (F. Werner). ERITREA: Massaua (Beccari). OBOCK: (C. Alluaud).

23. *Monomorium rhopalocerus* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 25 (♀), Pl. II, fig. 29. SANTSCHI, 1910, *ibid.*, LXXVIII, (1909), p. 359, fig. 4a (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 215 (♀).

Type locality: Cape Town, CAPE PROVINCE (E. Simon).

23<sub>1</sub>. Var. *gabrielense* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 418 (♀, ♀).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

23a. Subsp. *speluncarum* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 72, fig. 6 (♀). ALLUAUD and JEANNEL, 1914, Arch. Zool. Gén. Exp., LIII, p. 366.

Type locality: Shimoni, BRITISH EAST AFRICA (Alluaud and Jeannel).

24. *Monomorium schultzei* FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 18 (♀, ♀); 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 244 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 231 (♀, ♀).

Type locality: Steinkopf, CAPE PROVINCE (L. Schultze).

CAPE PROVINCE: Lower Albany; Grahamstown (Hewitt). GERMAN SOUTHWEST AFRICA: Prince of Wales Bay, south of Angra Pepueña (L. Schultze).

25. *Monomorium voeltzkowi* FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 78 (♀).

Type locality: Chake Chake, Pemba Island, BRITISH EAST AFRICA (Voeltzkow).

26. *Monomorium zulu* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 18 (♀). TRÄGÅRDH, *ibid.*, p. 44. ARNOLD, 1916, Ann. South African Mus., XIV, p. 215 (♀).

Type locality: Junction of the Umfolosi Rivers, ZULULAND (I. Trägårdh).

## Subgenus 2. *Syllophopsis* SANTSCHI

*Monomorium* subg. *Syllophopsis* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 259.

Subgenotype: *Monomorium modestum* Santschi, 1915.

27. *Monomorium (Syllophopsis) modestum* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 250, fig. 8 (♀).

*Monomorium modestum* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 17 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 214 (♀).

Type locality: Stamford Hill, NATAL (I. Trägårdh).

27<sub>1</sub>. Var. *smutsi*, new name.

*Monomorium (Syllophopsis) modestum* var. *boerorum* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 260, fig. 9 (♀) (*nec M. minutum* subsp. *boerorum* Forel, 1910).

Type locality: Pretoria, TRANSVAAL.

Subgenus 3. **Xeromyrmex** EMERY

*Monomorium* subg. *Xeromyrmex* EMERY, 1915, Bull. Soc. Ent. France, pp. 190 and 191.

Subgenotype: *Formica salomonis* Linnæus, 1758.

28. **Monomorium (Xeromyrmex) afrum** ERN. ANDRÉ.

*Monomorium afrum* ERN. ANDRÉ, in Magretti, 1884, Ann. Mus. Civ. Genova, XXI, p. 540 (♀); in Magretti, 1884, Bull. Soc. Ent. Italiana, XV, (1883), p. 244 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 65. FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 136 (♀). REICHENSPERGER, 1913, Zool. Jahrb. Abt. Syst., XXXV, p. 198. SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 72 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 206 (♀), Pl. v, figs. 58, 58a, 58b, 58c.

Type locality: Atbara River, ANGLO-EGYPTIAN SUDAN (Magretti).

RHODESIA: Bulawayo (G. Arnold). BRITISH EAST AFRICA: Tiwi; Samburu, Wa-Nyika (Alluaud and Jeannel).

28<sub>1</sub>. Var. **asmarense** FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 250 (♀, ♂). EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 4 (♀).

Type locality: Asmara, ERITREA (K. Escherich).

ERITREA: Ghinda (K. Escherich); Nefasit (F. Silvestri; K. Escherich).

28<sub>2</sub>. Var. **fultor** FOREL, 1913, Rev. Zool. Afr., II, p. 332 (♀). BEQUAERT, *ibid.*, p. 427. See p. 163.

Type locality: Sankisia, BELGIAN CONGO (J. Bequaert).

BELGIAN CONGO: Niapu; Garamba (Lang and Chapin).

29. **Monomorium (Xeromyrmex) albopilosum** EMERY.

*Monomorium albopilosum* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 24 (♀). SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 17 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 207 (♀).

Type locality: Bloemfontein, TRANSVAAL (E. Simon).

CAPE PROVINCE: Kimberley (E. Simon). TRANSVAAL: Makapan (E. Simon). ZULULAND: Umfolosi (I. Trägårdh). BASUTOLAND: Leribe (Weitzacker).

29<sub>1</sub>. Var. **clarithorax** SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 235.

Type locality: NATAL (Haviland).

29<sub>2</sub>. Var. **thales** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 136 (♀); 1916, Rev. Suisse Zool., XXIV, p. 417 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 207 (♀, ♀, ♂), Pl. v, fig. 61.

Type locality: Springvale, RHODESIA (G. Arnold).

RHODESIA: Matoppo Hills; Bulawayo (G. Arnold). TRANSVAAL: Shilouvane (Junod); Pretoria (Lounsbury).

29a. Subsp. **paucipilosum** SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 235 (♀).

Type locality: NATAL (Haviland).

30. **Monomorium (Xeromyrmex) bicolor** EMERY. See p. 162.

*Monomorium bicolor* EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 368 (♀); 1881, *ibid.*, XVI, pp. 531 and 532 (♀). ERN. ANDRÉ, 1883, 'Spec. Hym. Europ. Algérie,' II, p. 334 (♀). MAGRETTI, 1884, Bull. Soc. Ent. Italiana, XV, (1883), p. 244 (♀); 1884, Ann. Mus. Civ. Genova, XXI, p. 540 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 66. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 88; 1901, *ibid.*, X, p. 311. MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 7 (♀, ♀). FOREL, in Baum, 1903, 'Kunene-Sambesi Expedition,' p. 564; 1907, Ann. Mus. Nat. Hungarici,

V, p. 18 (♀); 1907, Mitt. Naturh. Mus. Hamburg, XXIV, p. 15 (♀). EMERY, 1908, Deutsch. Ent. Zeitschr., p. 677 (♀). FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 251 (♀, ♀). SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, p. 163; 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 353 (♀). EMERY, 1915, *ibid.*, X, p. 4 (♀).

*Monomorium bicolor* var. *cærulescens* SANTSCHI, 1912, Bull. Soc. Hist. Nat. Afr. Nord, IV, p. 148 (♀).

Type locality: Sciotel, ERITREA (Beccari).

SENEGAMBIA: Dakar (F. Silvestri). PORTUGUESE GUINEA: Bissao (Knipping). FRENCH GUINEA: Kindia; Mamou (F. Silvestri). IVORY COAST: (Lohier). BELGIAN CONGO: Leopoldville; Garamba (Lang and Chapin). MOSSAMEDES: between the Cubango and Cuito Rivers (Baum and Van der Kellen). ORANGE FREE STATE: Bothaville (H. Brauns). GERMAN EAST AFRICA: Mto-ya-Kifaru (Katona). SOUTHERN ABYSSINIA: (Ilg). ERITREA: Nefasit (F. Silvestri; K. Escherich); Ghinda (K. Escherich). ANGLO-EGYPTIAN SUDAN: Suakin; Metemma (Magretti). FRENCH SOMALILAND: Obock (Maindron).

30a. Subsp. **dakarense** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 353 (♀).

Type locality: Dakar, SENEGAMBIA (F. Silvestri).

SENEGAMBIA: Longa (Roubaud).

30b. Subsp. **hirsutum** FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 251 (♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 353 (♀).

Type locality: Nefasit, ERITREA (K. Escherich).

SOMALILAND.

30c. Subsp. **nitidiventre** EMERY, 1893, Ann. Soc. Ent. France, LXII, p. 256 (♀). MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicid.,' p. 4. EMERY, 1908, Deutsch. Ent. Zeitschr., p. 677, fig. 5 (♀). KARAWAIEW, 1911, Rev. Russe Ent., XI, p. 5, figs. 1 and 2 (♀, ♀, ♂). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 353 (♀). FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 244 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 209 (♀, ♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 73 (♀). A. J. CHALMERS, 1919, Journ. Trop. Med. Hyg., London, XXII, p. 117.

*Monomorium bicolor* var. *nitidiventris* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 441 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 209 (♀, ♀).

Type locality: Aden, SOUTHERN ARABIA (E. Simon).

EGYPT: Lower Egypt; Assuan (I. Trägårdh). ANGLO-EGYPTIAN SUDAN: Khartum (Karawaiew). BRITISH EAST AFRICA: Naivasha, Rift Valley, 1900 m. (Alluaud and Jeannel). RHODESIA: Victoria Falls (R. C. Wroughton); Bulawayo (G. Arnold). ORANGE FREE STATE: Bothaville (H. Brauns).

31. **Monomorium (Xeromyrmex) hannonis** SANTSCHI.

*Monomorium hannonis* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 358 (♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

32. **Monomorium (Xeromyrmex) medinae** FOREL.

*Monomorium medinae* FOREL, 1892, Ann. Soc. Ent. Belgique, XXXVI, p. 454 (♀). EMERY, 1908, Deutsch. Ent. Zeitschr., p. 679, fig. 9 (♀).

Type locality: Laguna, CANARY ISLANDS (Medina).

32a. Subsp. **fridae** FOREL, 1905, Ann. Soc. Ent. Belgique, XLIX, p. 183 (♀).  
ARNOLD, 1916, Ann. South African Mus., XIV, p. 219 (♀).

Type locality: Willowmore, CAPE PROVINCE (H. Brauns).

33. **Monomorium (Xeromyrmex) salomonis** (LINNÆUS) EMERY, 1915, Bull. Soc. Ent. France, p. 190. See p. 1027.

*Formica salomonis* LINNÆUS, 1758, 'Syst. Nat.,' Ed. 10, I, p. 580.

*Monomorium salomonis* ERN. ANDRÉ, 1883, 'Spec. Hym. Europ. Algérie,' II, pp. 336, 339 and 342 (♀, ♀, ♂), Pl. XXII, figs. 1-4. MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicid.,' p. 4. EMERY, 1908, Deutsch. Ent. Zeitschr., p. 674 (♀, ♀, ♂).

*Monomorium salomonis* ARNOLD, 1916, Ann. South African Mus., XIV, p. 219 (♀, ♀, ♂).

Type locality: EGYPT.

Cosmopolitan. ANGLO-EGYPTIAN SUDAN: Ondurman; Wadi Halfa (I. Trägårdh).

33i. Var. **parvinode** FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 88 (♀).

Type locality: Southern ABYSSINIA (Ilg).

332. Var. **pullulum** SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 235 (♀).

Type locality: Senegal, SENEGAMBIA (Claveau).

33a. Subsp. **carbo** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) I, p. 246 (♀).  
EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 4 (♀).

*Monomorium salomonis* var. *carbo* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 251 (♀).

Type locality: Ghinda, ERITREA (K. Escherich).

ERITREA: Nefasit (F. Silvestri).

33b. Subsp. **damarense** FOREL, in Schultze, 1910, 'Forschungsreise in Süd-afrika,' IV, p. 17 (♀).

*Monomorium salomonis* subsp. *damarense* ARNOLD, 1916, Ann. South African Mus., XIV, p. 223 (♀).

Type locality: Gawieb, GERMAN SOUTHWEST AFRICA (L. Schultze).

33c. Subsp. **delagoense** FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 87 (♀); 1910, Ann. Soc. Ent. Belgique, LIV, p. 441 (♀, ♀, ♂). SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 17 (♀). TRÄGÅRDH, *ibid.*, p. 44.

*Monomorium salomonis* subsp. *delagoensis* ARNOLD, 1916, Ann. South African Mus., XIV, p. 226 (♀, ♀, ♂).

Type locality: Delagoa Bay, PORTUGUESE EAST AFRICA (Liengme).

NATAL: (Haviland); Estcourt; Pietermaritzburg (I. Trägårdh). ZULULAND: Dukudu; Umfolosi (I. Trägårdh).

33c1. Var. **grahamstownense** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) I, p. 245 (♀).

*Monomorium salomonis* subsp. *delagoense* var. *grahamstownensis* ARNOLD, 1916, Ann. South African Mus., XIV, p. 227 (♀).

Type locality: Grahamstown, CAPE PROVINCE (G. Arnold).

33d. Subsp. **herero** FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 16 (♀, ♀). SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), p. 284.

*Monomorium salomonis* subsp. *herero* ARNOLD, 1916, Ann. South African Mus., XIV, p. 222 (♀, ♀).

Type locality: Possession Island, GERMAN SOUTHWEST AFRICA (L. Schultze).

- 33d<sub>1</sub>. Var. **belli** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 245 (♀).  
*Monomorium salamonis* subsp. *herero* var. *belli* ARNOLD, 1916, Ann. South African Mus., XIV, p. 223 (♀).  
 Type locality: Willowmore, CAPE PROVINCE (H. Brauns).
- 33d<sub>2</sub>. Var. **willowmorensis** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 245 (♀).  
*Monomorium salamonis* subsp. *herero* var. *willowmorensis* ARNOLD, 1916, Ann. South African Mus., XIV, p. 222 (♀).  
 Type locality: Willowmore, CAPE PROVINCE (H. Brauns).
- 33e. Subsp. **junodi** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 441 (♀); 1913, *ibid.*, LVII, p. 137 (♀).  
*Monomorium salamonis* subsp. *junodi* ARNOLD, 1916, Ann. South African Mus., XIV, p. 221 (♀).  
 Type locality: Shilouvane, TRANSVAAL (Junod).  
 RHODESIA: Bulawayo (G. Arnold).
- 33e<sub>1</sub>. Var. **opacius** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 136 (♀).  
 SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 235.  
*Monomorium salamonis* var. *opacior* ARNOLD, 1916, Ann. South African Mus., XIV, p. 220 (♀, ♀).  
 Type locality: Bulawayo, RHODESIA (G. Arnold).
- 33f. Subsp. **ocellatum** SANTSCHI, 1920, Ann. Soc. Ent. France, LXXXVIII, (1919), p. 377 (♀).  
 Type locality: Willowmore, CAPE PROVINCE (H. Brauns).
- 33g. Subsp. **subopacum** (F. SMITH) EMERY, 1908, Deutsch. Ent. Zeitschr., p. 676, fig. 4 (♀, ♀). WASMANN, 1912, Zeitschr. Wiss. Zool., CI, p. 107.  
*Myrmica (Monomorium) subopaca* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 127 (♀, ♀).  
*Monomorium mediterraneum* MAYR, 1861, 'Europ. Formicid.,' p. 72 (♀, ♀).  
 ROGER, 1862, Berlin. Ent. Zeitschr., VI, p. 294.  
*Monomorium subopacum* subsp. *mediterraneum* EMERY, 1881, Ann. Mus. Civ. Genova, XVI, p. 531 (♀).  
*Monomorium subopacum* var. *mediterraneum* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 133.  
*Monomorium subopacum* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 753 (♀); 1863, *ibid.*, XIII, p. 429. ERN. ANDRÉ, 1874, Rev. Mag. Zool., (3) II, p. 199. EMERY, 1881, Ann. Mus. Civ. Genova, XVI, p. 531 (♀); 1892, *ibid.*, XXXII, p. 117. ERN. ANDRÉ, 1883, 'Spec. Hym. Europ. Algérie,' II, pp. 336 and 339 (♀, ♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 70.  
*Monomorium salomonis* var. *subopacum* FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 18 (♀). SANTSCHI, 1908, Ann. Soc. Ent. France, LXXXVII, p. 517 (♀, ♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 353 (♀).  
*Monomorium salamonis* subsp. *subopacum* ARNOLD, 1916, Ann. South African Mus., XIV, p. 224 (♀, ♀).  
 Type locality: MADEIRA (T. V. Wollaston).  
 CANARIES, MOROCCO, southern SPAIN, SARDINIA, SICILY, NAXOS, ALGIERS, EGYPT. CAPE PROVINCE: Cape Town (Raffray); Willowmore (H. Brauns). RHODESIA: Bulawayo (G. Arnold). SOMALILAND: Obbia; Gubbet (Bricchetti-Robecchi). GOLD COAST: Kitta (H. Brauns).

33g. Var. **anceps** (EMERY).

*Monomorium subopacum* var. *anceps* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 24 (♀).

*Monomorium salomonis* subsp. *subopacum* var. *anceps* ARNOLD, 1916, Ann. South African Mus., XIV, p. 225 (♀).

Type locality: Hamman's Kraal, TRANSVAAL (E. Simon).

33g. Var. **santschiellum**, new name.

*Monomorium salomonis* subsp. *subopacum* var. *senegalense* SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 306 (♀) (*nec Monomorium senegalense* Röger, 1862).

Type locality: St. Louis, SENEGAMBIA (Claveau).

33h. Subsp. **termitarium** FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 17 (♀, ♀); 1910, Ann. Soc. Ent. Belgique, LIV, p. 441.

*Monomorium salomonis* subsp. *termitarium* ARNOLD, 1916, Ann. South African Mus., XIV, p. 224 (♀, ♀).

Type locality: Kooa, BECHUANALAND (L. Schultze).

MOSSAMEDES: (Baum and Van der Kellen).

33h. Var. **disertum** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 417.

*Monomorium salomonis* var. *diserta* FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 216 (♀).

*Monomorium salomonis* var. *diserta* ARNOLD, 1916, Ann. South African Mus., XIV, p. 221 (♀).

Type locality: Shiloh, SOUTHERN RHODESIA (G. Arnold).

34. **Monomorium (Xeromyrmex) senegalense** ROGER.

*Monomorium senegalense* ROGER, 1862, Berlin. Ent. Zeitschr., VI, p. 294, footnote (♀); 1863, 'Verzeich. Formicid.,' p. 31. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 429. EMERY, 1881, Ann. Mus. Civ. Genova, XVI, p. 530 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 70.

Type locality: Senegal, SENEGAMBIA.

35. **Monomorium (Xeromyrmex) setuliferum** FOREL.

*Monomorium setuliferum* FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 16 (♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 354 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 227 (♀).

Type locality: Khakhea, BECHUANALAND (L. Schultze).

ANGOLA: Quifangondo (F. Silvestri). GERMAN SOUTHWEST AFRICA: Okahandja (Casper). BECHUANALAND: Severelela (L. Schultze).

35. Var. **notulum** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 441 (♀, ♂); 1913, *ibid.*, LVII, p. 137 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 228 (♀, ♂).

Type locality: NATAL (Haviland).

SOUTHERN RHODESIA: Bulawayo; Springvale (G. Arnold).

36. **Monomorium (Xeromyrmex) subdentatum** FOREL.

*Monomorium subdentatum* FOREL, 1913, Rev. Zool. Afr., II, p. 332 (♀). BEQUAERT, *ibid.*, p. 427.

Type locality: Elisabethville, BELGIAN CONGO (J. Bequaert).

37. **Monomorium (Xeromyrmex) tchelichofi** FOREL.

*Monomorium tchelichofi* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 244 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 211 (♀).

Type locality: Willowmore, CAPE PROVINCE (H. Brauns).

38. **Monomorium (Xeromyrmex) venustum** (F. SMITH).

*Myrmica (Monomarium) venusta* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 126 (♀).

*Monomorium venustum* EMERY, 1881, Ann. Mus. Civ. Genova, XVI, p. 531 (♀).  
ERN. ANDRÉ, 1881, Ann. Soc. Ent. France, (6) I, p. 65 (♀, ♀, ♂), Pl. III, figs. 16-18;  
1883, 'Spec. Hym. Europ. Algérie,' II, pp. 335, 339, and 343 (♀, ♀, ♂), Pl. XXII,  
figs. 6 and 7. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 70. FOREL, 1894, Mitth.  
Schweiz. Ent. Ges., IX, p. 88. EMERY, 1908, Deutsch. Ent. Zeitschr., p. 677, fig.  
fig. 6b (♀, ♀).

Type locality: SYRIA.

SOUTHERN ABYSSINIA: (Ilg).

Subgenus 4. **Parholcomyrme** EMERY

*Monomorium* subg. *Parholcomyrme* EMERY, 1915, Bull. Soc. Ent. France, p. 190.

*Monomorium* subg. *Paraholcomyrme* EMERY, *ibid.*, p. 191.

Subgenotype: *Myrmica gracillima* F. Smith, 1861.

39. **Monomorium (Parholcomyrme?) amblyops** EMERY.

*Monomorium amblyops* EMERY, 1894, Bull. Soc. Ent. Italiana, XXVI, p. 148.

Type locality: MATTO GROSSO, BRAZIL.

39a. Subsp. **prossæ** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 418.

*Monomorium amblyops* subsp. *bulawayense* FOREL, 1914, Bull. Soc. Vaudoise  
Sc. Nat., (5) L, p. 247 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 236  
(♀, ♀, ♂). (*nec Monomorium exiguum* var. *bulawayense* Forel, 1913).

Type locality: Hillside, Bulawayo, RHODESIA (G. Arnold).

40. **Monomorium (Parholcomyrme) australe** (EMERY).

*Monomorium subopacum* subsp. *australe* EMERY, 1886, Bull. Soc. Ent. Italiana, XVIII, p. 363 (♀, ♀).

*Monomorium australe* DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 65.

*Monomorium subopacum* subsp. *australe* var. *laviceps* EMERY, 1886, Bull. Soc.  
Ent. Italiana, XVIII, p. 364 (♀).

*Monomorium salomonis* subsp. *australe* FOREL, 1913, Deutsch. Ent. Zeitschr.,  
Beih., p. 216 (♀, ♀).

*Monomorium salomonis* subsp. *australe* ARNOLD, 1916, Ann. South African Mus.,  
XIV, p. 225 (♀, ♀).

*Monomorium subopacum* var. *australe* DIXEY and LONGSTAFF, 1907, Trans. Ent.  
Soc. London, p. 339.

*Monomorium (Paraholcomyrme) australe* SANTSCHI, 1917, Ann. Soc. Ent. France,  
LXXXV, (1916), p. 282 (♀, ♀).

Type locality: Cape of Good Hope, CAPE PROVINCE (L. Péringuey).

CAPE PROVINCE: Willowmore (H. Brauns); Kimberley (Dixey and Longstaff).

40a. Subsp. **havilandi** (FOREL) SANTSCHI, 1917, Ann. Soc. Ent. France,  
LXXXV, (1916), p. 282 (♀, ♀).

*Monomorium havilandi* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 443 (♀,  
♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 216 (♀, ♀).

Type locality: NATAL (Haviland).

CAPE PROVINCE: Cape of Good Hope (L. Péringuey; G. Arnold).



41. **Monomorium (Parholcomymex) destructor** (JERDON).

*Atta destructor* JERDON, 1851, Madras Journ. Litt. Sc., XVII, p. 105; 1854, Ann. Mag. Nat. Hist., (2) XIII, p. 47 (♀).

*Myrmica vastator* F. SMITH, 1858, Journ. Proc. Linn. Soc. London, Zool., II, p. 71 (♀).

*Myrmica ominosa* GERSTÄCKER, 1858, Monatsb. Ak. Wiss. Berlin, p. 263 (♀); in Peters, 1862, 'Reise n. Mossambique, Zool.,' V, p. 517 (♀).

*Myrmica atomaria* GERSTÄCKER, 1858, Monatsb. Ak. Wiss. Berlin, p. 263 (♀); in Peters, 1862, 'Reise n. Mossambique, Zool.,' V, p. 518 (♀).

*Myrmica (Monomarium) vastator* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 123 (♀).

*Myrmica (Monomarium) basalis* F. SMITH, *ibid.*, p. 125 (♀).

*Monomorium ominosum* ROGER, 1863, 'Verzeich. Formicid.,' p. 31. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 429.

*Monomorium atomarium* MAYR, 1863, *ibid.*, XIII, p. 429.

*Monomorium basale* MAYR, 1865, 'Reise Novara, Zool.,' II, Formicidæ, p. 92 (♀). EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 369, fig. (♀, ♀); 1881, *ibid.*, XVI, p. 532 (♀). MAYR, 1886, Verh. Zool. Bot. Ges. Wien, XXXVI, p. 359 (♀).

*Monomorium vastator* MAYR, *ibid.*, p. 359. FOREL, 1897, Abhandl. Senckenberg. Naturf. Ges., XXI, p. 188 (♀).

*Monomorium destructor* EMERY, in Dalla Torre, 1893, 'Cat. Hym.,' VII, p. 66. SANTSCHI, 1908, Ann. Soc. Ent. France, LXXVII, p. 517 (♀). EMERY, 1908, Deutsch. Ent. Zeitschr., p. 671 (♀, ♀).

Type locality: INDIA (Jerdon).

Tropicopolitan. ERITREA: Sciotel (Beccari). ZANZIBAR: (Voeltzkow). PORTUGUESE EAST AFRICA: Quilimane (Peters).

41a. Subsp. **kalahariense** FOREL, in Schultze, 1910, 'Forschungsreise in Süd-afrika,' IV, p. 18 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 235 (♀).

Type locality: Kooa to Sekgoma, BECHUANALAND (L. Schultze).

41a<sub>1</sub>. Var. **despectum** FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 252 (♀); 1913, Rev. Zool. Afr., II, p. 331 (♀, ♀). BEQUAERT, *ibid.*, p. 427.

Type locality: Ghinda, ERITREA (K. Escherich).

BELGIAN CONGO: Sankisia (J. Bequaert).

42. **Monomorium (Parholcomymex) dispar** EMERY.

*Monomorium dispar* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 24 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 235 (♀).

Type locality: Makapan, TRANSVAAL (E. Simon).

43. **Monomorium (Parholcomymex) gracillimum** (F. SMITH) EMERY, 1915, Bull. Soc. Ent. France, p. 190. See p. 1027.

*Myrmica gracillima* F. SMITH, 1862, Journ. Proc. Linn. Soc. London, Zool., VI, p. 34 (♀).

*Monomorium gracillimum* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 753 (♀); 1863, *ibid.*, XIII, p. 429. EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 369, footnote, fig. (♀, ♀, ♂); 1881, *ibid.*, XVI, pp. 532 and 533 (♀). ERN. ANDRÉ, 1883, 'Spec. Hym. Europ. Algérie,' II, pp. 333, 337, and 340 (♀, ♀, ♂), Pl. XXII, figs. 8 and 9. MAGRETTI, 1884, Ann. Mus. Civ. Genova, XXI, p. 541 (♀); 1884, Bull. Soc. Ent. Italiana, XV, (1883), p. 244 (♀). DALLA TORRE, 1893, 'Cat. Hym.,'

VII, p. 67. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 88; 1902, Ann. Soc. Ent. Belgique, XLVI, p. 152 (♀). EMERY, 1908, Deutsch. Ent. Zeitschr., p. 669, fig. 2 (♀, ♀, ♂).

*Monomorium (Holcomyrrex) gracillimum* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 354 (♀).

Type locality: SYRIA.

SYRIA, TUNIS, southern ALGERIA, central ASIA, ARABIA, INDIA, JAVA, LAYSAN, etc. FRENCH GUINEA: Mamou (F. Silvestri). ANGLO-EGYPTIAN SUDAN: Kassala; El Hefera, Settit (Magretti). SOUTHERN ABYSSINIA: (Ilg).

43. Var. *karawajewi* (FOREL).

*Monomorium destructor* subsp. *gracillimum* var. *karawajewi* FOREL, 1913, Rev. Suisse Zool., XXI, p. 437 (♀).

*Monomorium minutum* var. *pallidipes* KARAWAIEW, 1911, Rev. Russe Ent., XI, p. 7 (♀) (*nec* Forel).

Type locality: Khartum, ANGLO-EGYPTIAN SUDAN (Karawaiew).

SYRIA: Rehobot near Jaffa (Aharoni).

43a. Subsp. *robustus* FOREL, 1892, Mitth. Schweiz. Ent. Ges., VIII, p. 352 (♀); 1894, *ibid.*, IX, p. 88. MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 12. See pp. 163 and 1027.

*Monomorium robustius* DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 69.

*Monomorium destructor* subsp. *robustus* FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 216 (♀).

Type locality: SOMALILAND (C. Keller).

SOUTHERN ABYSSINIA: (Ilg). BELGIAN CONGO: Yakuluku (Lang and Chapin). GERMAN EAST AFRICA: Mt. Meru (Sjöstedt).

#### Subgenus 5. *Holcomyrrex* MAYR

*Holcomyrrex* MAYR, 1878, Verh. Zool. Bot. Ges. Wien, XXVIII, p. 671.

*Aphænogaster* (part) ERN. ANDRÉ. *Atta* (part) ROGER.

*Monomorium* subg. *Holcomyrrex* EMERY, 1915, Bull. Soc. Ent. France, p. 191.

Subgenotype: *Holcomyrrex scabriceps* Mayr, 1878.

44. *Monomorium (Holcomyrrex) abyssinicum* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 250 (♀). SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 259 (♀).

*Holcomyrrex abyssinicus* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 83 (♀).

Type locality: SOUTHERN ABYSSINIA (Ilg).

ERITREA: Ghinda (K. Escherich). DAHOMEY: (Desanti).

#### Subgenus 6. *Lampromyrrex* MAYR

*Lampromyrrex* MAYR, 1868, Beiträge z. Naturkunde Preussens, I, p. 93.

*Monomorium* subg. *Mitara* EMERY, 1913, Ann. Soc. Ent. Belgique, LVII, p. 261 (type: *Monomorium leve* Mayr, 1879).

Subgenotype: *Lampromyrrex gracillimus* Mayr, 1868 = *Monomorium mayrianum* Wheeler, 1914, from the Baltic amber.

45. *Monomorium (Lampromyrrex) bequaerti* FOREL.

*Monomorium (Martia) bequaerti* FOREL, 1913, Rev. Zool. Afr., II, p. 334 (♀). BEQUAERT, *ibid.*, p. 428.

Type locality: Elisabethville, BELGIAN CONGO (J. Bequaert).

46. **Monomorium (Lampromyrmex) exiguum** FOREL.

*Monomorium exiguum* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 85 (♀).

*Monomorium (Martia) exiguum* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 351 (♀).

Type locality: SOUTHERN ABYSSINIA (Ilg).

BELGIAN CONGO: Leopoldville (J. Maes).

46i. Var. **bulawayense** FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 217 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 238 (♀).

Type locality: Bulawayo, RHODESIA (G. Arnold).

46a. Subsp. **flavescens** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 418 (♀).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

46b. Subsp. **mictile** (FOREL) EMERY, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 4 (♀, ♀).

*Monomorium (Martia) atomus* subsp. *mictilis* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 252 (♀, ♀).

*Monomorium (Mitara) atomus* subsp. *mictile* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 248. ARNOLD, 1916, Ann. South African Mus., XIV, p. 239 (♀, ♀).

Type locality: Ghinda, ERITREA (K. Escherich; F. Silvestri).

ERITREA: Nefasit (K. Escherich). NATAL: Durban (G. Arnold; C. B. Cooper).

47. **Monomorium (Lampromyrmex) faurei** SANTSCHI.

*Monomorium (Mitara) atomus* subsp. *mictile* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 354 (♀) (*nec* Forel).

*Monomorium (Mitara) faurei* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 260, fig. 10 (♀).

Type locality: Gaboon, FRENCH CONGO (F. Faure).

FRENCH GUINEA: Mamou (F. Silvestri).

48. **Monomorium (Lampromyrmex) orientale** MAYR.

*Monomorium orientale* MAYR, 1878, Verh. Zool. Bot. Ges. Wien, XXVIII, p. 670 (♀). EMERY, 1908, Deutsch. Ent. Zeitschr., p. 685 (♀, ♀).

*Monomorium (Mitara) orientale* SANTSCHI, 1915, Bull. Soc. Hist. Nat. Afr. Nord, VII, p. 58, fig. 5 (♀).

Type locality: Calcutta, INDIA (Rothney).

48i. Var. **africanum** "MAYR" FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 78 (♀). This has apparently not been described.

Type locality: unknown.

BRITISH EAST AFRICA: Fundu Island near Pemba (Voeltzkow).

482. Var. **clavicornis** (ERN. ANDRÉ) MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicid.,' p. 4. EMERY, 1908, Deutsch. Ent. Zeitschr., p. 686.

*Monomorium clavicornis* ERN. ANDRÉ, 1881, Ann. Soc. Ent. France, LI, p. 68 (♀), Pl. III, fig. 9; 1883, 'Spec. Hym. Europ. Algérie,' II, p. 332 (♀), Pl. XXII, fig. 5. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 66.

Type locality: SYRIA.

ANGLO-EGYPTIAN SUDAN: Kaka, White Nile (I. Trägårdh).

49. **Monomorium (Lampromyrmex) rosæ** SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 13, fig. 2c-f (♀).

Type locality: BELGIAN CONGO (J. Bequaert); no further locality is given, but the collector's field-number (No. 36) refers to Boma, according to verbal information received from Dr. Bequaert.

50. **Monomorium (Lampromyrmex) rotundatum** SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 14, fig. 2a (♀).

Type locality: Durban, NATAL (Marley).

### **Diplomorium MAYR**

*Diplomorium* MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 16.

Genotype: *Diplomorium longipenne* Mayr, 1901.

1. **Diplomorium longipenne** MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 18 (♀, ♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 240 (♀, ♀).

Type locality: Port Elizabeth, CAPE PROVINCE (H. Brauns).

### **Bondroitia FOREL**

*Diplomorium* subg. *Bondroitia* FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 398.

*Bondroitia* FOREL, 1915, 'Fauna Ins. Helvetiæ, Hym., Formicidæ,' pp. 10 and 38.

Genotype: *Diplomorium (Bondroitia) lujæ* Forel, 1909.

1. **Bondroitia lujæ** (FOREL).

*Diplomorium lujæ* FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 72 (♀, ♀, ♂).

*Diplomorium (Bondroitia) lujæ* FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 398 (♀, ♀, ♂).

Type locality: Sankuru, BELGIAN CONGO (Luja).

### **Solenopsis WESTWOOD**

*Solenopsis* WESTWOOD, 1840, Ann. Mag. Nat. Hist., VI, p. 86.

*Diplothroptrum* MAYR, 1855, Verh. Zool. Bot. Ges. Wien, V, p. 449.

*Atta* (part) FABRICIUS, JERDON, F. SMITH, etc. *Crematogaster* (part) F. SMITH. *Formica* LATREILLE, etc. *Myrmica* LATREILLE, etc.

Genotype: *Solenopsis mandibularis* Westwood, 1840.

1. **Solenopsis africana** (SANTSCHI) EMERY, 1915, Rend. Accad. Sc. Bologna, N. S., XIX, p. 59, fig. 1 (♀).

*Solenopsis fugax* subsp. *africana* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 81 (♀, ♂).

Type locality: Blue Post Hotel, Kikuyu, 1550 m., BRITISH EAST AFRICA (Alluaud and Jeannel).

2. **Solenopsis capensis** MAYR, 1866, Verh. Zool. Bot. Ges. Wien, XVI, p. 905 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 75.

Type locality: Cape of Good Hope.

3. **Solenopsis geminata** (FABRICIUS) ROGER, 1863, 'Verzeich. Formicid.,' pp. 32 and 49. MAYR, 1867, Tijdschr. v. Ent., X, p. 109 (♀, ♀, ♂); 1870, Verh. Zool. Bot. Ges. Wien, XX, p. 996 (♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 359; 1913, Ann. Soc. Ent. Belgique, LVII, p. 306 (2, ♀, ♀).

*Atta geminata* FABRICIUS, 1804, 'Syst. Piez.,' p. 423 (♀).

*Solenopsis geminata* var. *innota* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 257, fig. 6 (2, ♀, ♀, ♂).

Type locality: South America.

Tropicopolitan. LIBERIA: Monrovia (Delafosse). FRENCH CONGO: Sankita (F. Faure); Brazzaville (Valerio). BELGIAN CONGO: Goma (Valerio).

4. **Solenopsis gnomula** EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 13, fig. 6 (♀).

Type locality: Nefasit, ERITREA (F. Silvestri).

5. **Solenopsis maligna** SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 359, fig. 5 (♀). EMERY, 1915, Rend. Accad. Sc. Bologna, N. S., XIX, p. 64, fig. 6 (♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

6. **Solenopsis orbuloides** ERN. ANDRÉ, 1890, Rev. d'Ent. Caen, IX, p. 321 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 77. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 144. SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 354 (♂, ♀). EMERY, 1915, Rend. Accad. Sc. Bologna, N. S., XIX, p. 59.

Type locality: SIERRA LEONE (Mocquerys).

NIGERIA: Olokemeji; Lagos (F. Silvestri).

7. **Solenopsis punctaticeps** MAYR, 1865, 'Reise Novara, Zool.,' II, Formicidæ, p. 109 (♀); 1870, Verh. Zool. Bot. Ges. Wien, XX, p. 996 (♀); 1887, *ibid.*, XXXVII, p. 616 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 77. WASMANN, 1899, Deutsch. Ent. Zeitschr., p. 405. MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 14 (♀). FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 430; 1911, Rev. Zool. Afr., I, p. 276 (♂); 1913, Ann. Soc. Ent. Belgique, LVII, p. 138 (♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 355 (♀); 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 19, figs. 1, 2 (♂, ♀). TRÄGÅRDH, *ibid.*, p. 44. EMERY, 1915, Rend. Accad. Sc. Bologna, N. S., XIX, pp. 60 *et seq.*, fig. 2 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 243 (♂, ♀, ♂), Pl. VI, figs. 78, 78a, 78b.

*Solenopsis punctatoceps* J. HEWITT, 1920, South African Journ. Nat. Hist., II, p. 109.

Type locality: Table Mountain, Cape of Good Hope (Novara Expedition).

RHODESIA: (G. Arnold). NATAL: Pietermaritzburg; Balgowan (I. Trägårdh); Estcourt (R. C. Wroughton); Shiyre (Haviland). ORANGE FREE STATE: Bothaville (H. Brauns). CAPE PROVINCE: Port Elizabeth (H. Brauns); St. Croix Island, Algoa Bay (Hewitt). ANGOLA: Quifangondo (F. Silvestri). BELGIAN CONGO: Congo da Lemba (R. Mayné).

71. Var. **cleptomana** (SANTSCHI) EMERY, 1915, Rend. Accad. Sc. Bologna, N. S., XIX, p. 65, fig. 7 (♀).

*Solenopsis cleptomana* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 80 (♀).

Type locality: Naivasha, Rift Valley, 1400 m., BRITISH EAST AFRICA (Alluaud and Jeannel).

7a. Subsp. **caffra** FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 16. EMERY, 1915, Rend. Accad. Sc. Bologna, N. S., XIX, p. 62, fig. 3, I and II (♀).

*Solenopsis punctaticeps* var. *caffra* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 99 (♂, ♀). EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 27. MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 15 (♀). FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 431 (♀); 1913, Rev. Zool. Afr., II, p. 337 (♀). BEQUAERT, *ibid.*, p. 429. FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 242 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 246 (♂, ♀).

Type locality: TRANSVAAL (P. Berthoud).

BELGIAN CONGO: Elisabethville (J. Bequaert). BECHUANALAND: Kooa (L. Schultz). TRANSVAAL: Pretoria (E. Simon). NATAL: (R. C. Wroughton). CAPE PROVINCE: Table Mt. (G. Arnold). PORTUGUESE EAST AFRICA: Delagoa Bay: (Liengme).

7a<sub>1</sub>. Var. **cyclops** (SANTSCHI).

*Solenopsis punctaticeps* subsp. *cyclops* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 19, fig. 1, 1 (♀, ♂).

*Solenopsis punctaticeps* subsp. *caffra* var. (?) *cyclops* EMERY, 1915, Rend. Accad. Sc. Bologna, N. S., XIX, p. 62, fig. 3, III (♀).

*Solenopsis punctaticeps* var. *cyclops* ARNOLD, 1916, Ann. South African Mus., XIV, p. 246 (♀, ♂).

Type locality: NATAL (I. Trägårdh).

NATAL: Durban (Marley; C. B. Cooper).

7a<sub>2</sub>. Var. **diversipilosa** (MAYR).

*Solenopsis punctaticeps* var. *diversipilosa* MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 15 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 247 (♀).

*Solenopsis punctaticeps* subsp. *caffra* var. (?) *diversipilosa* EMERY, 1915, Rend. Accad. Sc. Bologna, N. S., XIX, pp. 62, 65.

Type locality: Port Elizabeth, CAPE PROVINCE (H. Brauns).

CAPE PROVINCE: Grahamstown (Hewitt).

7b. Subsp. **erythræa** EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 12, fig. 5 (♀); 1915, Rend. Accad. Sc. Bologna, N. S., XIX, p. 64, fig. 5 (♀).

Type locality: Asmara, ERITREA (F. Silvestri).

ERITREA: Nefasit (F. Silvestri).

7c. Subsp. **indocilis** (SANTSCHI) EMERY, 1915, Rend. Accad. Sc. Bologna, N. S., XIX, p. 63, fig. 4 (♀).

*Solenopsis punctaticeps* var. *indocilis* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 355 (♀, ♀).

Type locality: Mamou, FRENCH GUINEA (F. Silvestri).

7d. Subsp. **kibaliensis** Wm. M. WHEELER. See p. 164 (♀, ♂).

Type locality: Vankerkhovenville, BELGIAN CONGO (Lang and Chapin).

8. ***Solenopsis sævissima*** (F. SMITH) MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 751 (♀).

*Myrmica sævissima* F. SMITH, 1855, Trans. Ent. Soc. London, (2) III, p. 166 (♀), Pl. XIII, fig. 18.

Type locality: Tapajos River, BRAZIL (W. H. Bates).

Neotropical and apparently spreading to other continents.

8i. Var. **itinerans** (FOREL).

*Solenopsis pylades* var. *itinerans* FOREL, 1911, Rev. Zool. Afr., I, p. 276 (♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 355 (♀).

Type locality: Kigerama, GERMAN EAST AFRICA.

FRENCH GUINEA: Konakry (F. Silvestri).

### **Anergatides** WASMANN

*Anergatides* WASMANN, 1915, Ent. Mitt. Deutsch. Ent. Mus. Berlin, IV, p. 281.

Genotype: *Anergatides kohli* Wasmann, 1915.

1. **Anergatides kohli** WASMANN, 1915, Ent. Mitt. Deutsch. Ent. Mus. Berlin, IV, p. 283 (♀, ♂), Pls. VII and VIII.

Type locality: Fikilini, near Stanleyville, BELGIAN CONGO (H. Kohl).

### **Pheidologeton** MAYR

*Pheidologeton* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 750.

*Phidologeton* BINGHAM, 1903, 'Fauna Brit. India, Hym.,' II, p. 160.

*Myrmica* (part) HEER. *Ocodoma* (part) JERDON. *Pheidole* (part) F. SMITH. *Solenopsis* (part) F. SMITH.

Genotype: *Ocodoma diversa* Jerdon, 1851 = *Pheidole ocellifera* F. Smith, 1858.

1. **Pheidologeton diversus** (JERDON) ROGER, 1863, 'Verzeich. Formicid.,' p. 30.

*Ocodoma diversa* JERDON, 1851, Madras Journ. Litt. Sc., XVII, p. 109 (2 ♀); 1854, Ann. Mag. Nat. Hist., (2) XIII, p. 51 (2 ♀).

Type locality: Wynaad, SOUTHERN INDIA (Jerdon).

Oriental Region.

- 1a. Subsp. **standfussi** FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 386 (2).

Type locality: GUINEA (locality extremely doubtful).

2. **Pheidologeton solitarius** STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 141 (♀).

Type locality: Sokode Basan, Togo (Schröder).

The generic reference of this species is perhaps erroneous.

The following species has been referred to *Pheidologeton* by Mayr, 1866, Verh. Zool. Bot. Ges. Wien, XVI, p. 899; but owing to its 12-jointed antennae it cannot belong in that genus. It is impossible to place it without examining the type specimen.

*Atta hostilis* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 165 (♀, ♀).

Type locality: Port Natal, NATAL.

### **Aneleus** EMERY

*Pheidologeton* subg. *Aneleus* EMERY, 1900, Termes. Füzetek, XXIII, p. 327.

Genotype: *Solenopsis similis* Mayr, 1862.

1. **Aneleus diabolus** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 355, fig. 19 (2, ♀).

*Oligomyrmex diabolus* SANTSCHI, 1913, Bull. Soc. Ent. France, pp. 459 and 460 (2, ♀).

Type locality: Victoria, CAMEROON (F. Silvestri).

2. **Aneleus perpusillus** (EMERY) ARNOLD, 1916, Ann. South African Mus., XIV, p. 254 (2, ♀).

*Pheidologeton perpusillum* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 26 (2, ♀), Pl. II, figs. 8-11. FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 431 (♀).

Type locality: Pretoria, TRANSVAAL (E. Simon).

CAPE PROVINCE: Kimberley (E. Simon). NATAL: in the Mountains (R. C. Wroughton).

- 2a. Subsp. **arnoldi** (FOREL) ARNOLD, 1916, Ann. South African Mus., XIV, p. 255 (2, ♀), Pl. VI, figs. 81, 81a.

*Pheidologeton perpusillum* subsp. *arnoldi* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) I, p. 242 (♀).

Type locality: Bulawayo, RHODESIA (G. Arnold).

2b. Subsp. **condecens** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 77 (2, ♀).

Type locality: New Moschi, Mt. Kilimanjaro, 800 m., GERMAN EAST AFRICA (Alluaud and Jeannel).

BRITISH EAST AFRICA: Likoni; Cheteni (Alluaud and Jeannel).

2c. Subsp. **spinosus** (FOREL).

*Pheidologeton (Aneleus) perpusillus* subsp. *spinosus* FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 17 (2).

Type locality: Kibosho, GERMAN EAST AFRICA (Katona).

3. **Aneleus politus** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 79, fig. 8 (♀).

Type locality: Blue Post Hotel, Kikuyu, 1520 m., BRITISH EAST AFRICA (Alluaud and Jeannel).

4. **Aneleus silvestrii** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 357, fig. 20 (2, ♀).

Type locality: Aburi, GOLD COAST (F. Silvestri).

### **Oligomyrmex** MAYR

*Oligomyrmex* MAYR, 1867, Tijdschr. v. Ent., X, p. 110.

Genotype: *Oligomyrmex concinnus* Mayr, 1867.

1. **Oligomyrmex alluaudi** SANTSCHI, 1913, Bull. Soc. Ent. France, pp. 459 and 460 (2, ♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 81, fig. 9 (2, ♀).

Type locality: Shimoni, BRITISH EAST AFRICA (Alluaud and Jeannel).

BRITISH EAST AFRICA: Kijabé, Kikuyu Escarpment, 2100 m. (Alluaud and Jeannel).

1. Var. **cataractæ** SANTSCHI, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 337 (2, ♀).

Type locality: Victoria Falls, RHODESIA (G. Arnold).

2. **Oligomyrmex angolensis** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 358, fig. 21 (2, ♀).

Type locality: Quifangondo, ANGOLA (F. Silvestri).

2a. Subsp. **congolensis** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 417 (2, ♀).

Type locality: BELGIAN CONGO (H. Kohl).

3. **Oligomyrmex arnoldi** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 123 (♀). SANTSCHI, 1913, Bull. Soc. Ent. France, p. 459 (♀).

Type locality: Bulawayo, RHODESIA (G. Arnold).

4. **Oligomyrmex debilis** SANTSCHI, 1913, Bull. Soc. Ent. France, p. 459 (♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 360, fig. 22 (2, ♀, ♂).

*Oligomyrmex (Aëomyrma?) debilis* SANTSCHI, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 337 (2, ♀).

Type locality: Kindia, FRENCH GUINEA (F. Silvestri).

FRENCH GUINEA: Konakry; Camayenne (F. Silvestri).



5. **Oligomyrmex erythræus** EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 14, fig. 7 (♂, ♀).

Type locality: Ghinda, ERITREA (F. Silvestri).

6. **Oligomyrmex jeanneli** SANTSCHI, 1913, Bull. Soc. Ent. France, pp. 459 and 460 (♂, ♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 83, fig. 10 (♂, ♀). ALLUAUD and JEANNEL, 1914, Arch. Zool. Gén. Exp., LIII, p. 366. EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 14 (♀).

Type locality: Shimon, BRITISH EAST AFRICA (Alluaud and Jeannel).

ERITREA: Nefasit (F. Silvestri).

### **Aëromyrma** FOREL

*Aëromyrma* FOREL, in Grandidier, 1891, 'Hist. Nat. Phys. Madagascar,' XX, 2, p. 198; 1891, Ann. Soc. Ent. Belgique, XXXV, C. R., p. cccvii.

Genotype: *Aëromyrma nosindambo* Forel, 1891.

1. **Aëromyrma africana** FOREL, in Schultze, 1910, 'Forschungsreise in Süd-afrika,' IV, p. 15 (♂). ARNOLD, 1916, Ann. South African Mus., XIV, p. 256 (♂). Type locality: Kooa to Sekgoma, BECHUANALAND (L. Schultze).

2. **Aëromyrma arnoldiella** (SANTSCHI).

*Oligomyrmex* (*Aëromyrma*) *arnoldiella* SANTSCHI, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 340, figs. 3a, j, p, q, v, x (♂, ♀).

Type locality: NATAL (Haviland).

3. **Aëromyrma hewitti** (SANTSCHI).

*Oligomyrmex* (*Aëromyrma*) *hewitti* SANTSCHI, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 341, figs. 3d, l, o, t, u (♂, ♀).

Type locality: Grahamstown, CAPE PROVINCE (Hewitt).

4. **Aëromyrma incerta** (SANTSCHI).

*Oligomyrmex* (*Aëromyrma*) *incertus* SANTSCHI, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 340, figs. 3e, h (♀).

Type locality: Hillside, Bulawayo, RHODESIA (G. Arnold).

5. **Aëromyrma lucida** (SANTSCHI).

*Oligomyrmex* (*Aëromyrma*) *lucidus* SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), p. 284 (♀); 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 339, figs. 3c and i (♀).

Type locality: Bunthorne Mine, Bulawayo, RHODESIA (G. Arnold).

6. **Aëromyrma nana** (SANTSCHI).

*Oligomyrmex* (*Aëromyrma*) *nanus* SANTSCHI, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 338, figs. 3f, m, r, s (♂, ♀).

Type locality: Amatongas Forest, PORTUGUESE EAST AFRICA (G. Arnold).

7. **Aëromyrma petulca** WM. M. WHEELER. See p. 166' (♂).

Type locality: Malela, BELGIAN CONGO (Lang and Chapin).

8. **Aëromyrma semilævis** (MAYR).

*Solenopsis semilævis* MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 15 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 247 (♀).

*Oligomyrmex* (*Aëromyrma*) *semilævis* EMERY, 1915, Rend. Accad. Sc. Bologna, N. S., XIX, p. 59.

Type locality: Port Elizabeth, CAPE PROVINCE (H. Brauns).

81. Var. **trægaordhi** (SANTSCHI).

*Oligomyrmex* (*Aëromyrma*) *semilævis* var. *trægaordhi* SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), p. 285.

*Aëromyrma* *trægaordhi* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 20, fig. 2 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 257 (♀).

*Oligomyrmex* (*Aëromyrma*) *trægaordhi* SANTSCHI, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 338, figs. 3e, g (♀).

Type locality: Balgowan, NATAL (I. Trägårdh).

NATAL: Stamford Hill (I. Trägårdh).

9. **Aëromyrma vorax** SANTSCHI, 1913, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 145, fig. LXIX (♀); 1914, *ibid.*, VIII, p. 358 (♀). F. SILVESTRI, 1914, 'Report Exped. to Africa in Search Nat. Enem. Fruit Flies,' p. 128 (♀), Pl. xxiv, fig. 49.

Type locality: Aburi, GOLD COAST (F. Silvestri).

**Carebara** WESTWOOD

*Carebara* WESTWOOD, 1840, Ann. Mag. Nat. Hist., VI, p. 86.

Genotype: *Carebara lignata* Westwood, 1840.

1. **Carebara ampla** SANTSCHI, 1912, Bull. Soc. Ent. France, p. 284 (♀, ♂); 1913, Ann. Soc. Ent. Belgique, LVII, p. 307.

Type locality: Majunga, BELGIAN CONGO (Gérard).

2. **Carebara arnoldi** (FOREL) SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 363, fig. 26 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 253 (♀).

*Oligomyrmex arnoldi* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 123 (♀).

Type locality: Bulawayo, RHODESIA (G. Arnold).

3. **Carebara junodi** FOREL, 1904, Ann. Soc. Ent. Belgique, XLVIII, p. 154 (♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, pp. 363 and 364, fig. 24 (♀).

*Carebara vidua* subsp. *junodi* FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 53 (♀, ♂); 1913, Rev. Zool. Afr., II, p. 336 (♀, ♀, ♂). BEQUAERT, *ibid.*, p. 428. ARNOLD, 1916, Ann. South African Mus., XIV, p. 252 (♀, ♀).

Type locality: Shilouvane, TRANSVAAL (H. Junod).

BELGIAN CONGO: Katanga (Lemaire); Sankisia (J. Bequaert); Kalumba; Katumba (Neave); Lake Moero.

4. **Carebara langi** WM. M. WHEELER. See p. 173 (♀).

Type locality: Stanleyville, BELGIAN CONGO (Lang and Chapin).

5. **Carebara osborni** WM. M. WHEELER. See p. 174 (♀, ♀, ♂).

Type locality: Niangara, BELGIAN CONGO (Lang and Chapin).

6. **Carebara sicheli** MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 754 (♀); 1863, *ibid.*, XIII, p. 402. ROGER, 1863, 'Verzeich. Formicid.,' p. 32. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 74. MAYR, 1904, Verh. Zool. Bot. Ges. Wien, LIV, p. 596 (♀). SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 307 (♀).

Type locality: Senegal, SENEGAMBIA.

UPPER DAHOMEY. ANGLO-EGYPTIAN SUDAN: White Nile.

7. **Carebara silvestrii** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, pp. 362 and 364, fig. 23 (♀).

Type locality: Mamou, FRENCH GUINEA (F. Silvestri).

8. *Carebara vidua* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 179 (♂). ROGER, 1863, 'Verzeich. Formicid.,' p. 32. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 402; 1866, *ibid.*, XVI, p. 904 (♀, ♂). EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 377 (♀, ♂). DISTANT, 1892, 'A Naturalist in the Transvaal,' p. 211. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 74. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 144 (♀). EMERY, 1899, Ann. Mus. Civ. Genova, XXXIX, p. 500 (♀, ♂). FOREL, 1901, Ann. Soc. Ent. Belgique, XLV, p. 392 (♀). BINGHAM, 1903, Ann. Mag. Nat. Hist., (7) XII, p. 61 (♀, ♂). WASMANN, in Jägerskiöld, 1904, 'Exped., XIII, Termitophilen,' p. 13 (♀). ZAVATTARI, 1907, Boll. Mus. Zool. Anat. Comp. Torino, XXII, No. 550, p. 2 (♀). FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 12 (♀, ♂). EMERY, 1912, Annuar. Mus. Zool. Univ. Napoli, N. S., III, No. 26, p. 2 (♀). FOREL, 1913, Rev. Zool. Afr., II, p. 337 (♀, ♂). SANTSCHI, 1913, Ann. Soc. Ent. Belgique, XXXVII, p. 306 (♂); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 363, fig. 25 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 84 (♀, ♂). ARNOLD, 1916, Ann. South African Mus., XIV, p. 249 (♀, ♀, ♂), Pl. VI, figs. 79, 80. See p. 177.

*Carebara colossus* GERSTÄCKER, 1858, Monatsb. Ak. Wiss. Berlin, p. 263 (♀); in Peters, 1862, 'Reise n. Mossambique, Zool.,' V, p. 512 (♀), Pl. xxxii, fig. 8. ROGER, 1863, 'Verzeich. Formicid.,' p. 32. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 402.

*Carebara dux* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 179 (♀). ROGER, 1863, 'Verzeich. Formicid.,' p. 32. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 402.

*Carebara vidua* var. *dux* FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 53 (♀); 1913, Rev. Zool. Afr., II, p. 337 (♀).

*Carabara vidua* E. WARREN, 1909, Ann. Natal Mus., II, pt. 1, p. 120.

*Carebara vidua* var. *abdominalis* SANTSCHI, 1912, Bull. Soc. Ent. France, p. 285 (♀).

*Carebara vidua* subsp. *abdominalis* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 84 (♀).

Type locality: Port Natal, NATAL.

BELGIAN CONGO: Niangara; Faradje (Lang and Chapin); Yakuluku (J. Rodhain); Katanga (Lemaire); valley of the Lubumbashi (Buttgenbach); Kwesi to Kilo (Bayer). ANGLO-EGYPTIAN SUDAN: Gebel Achmed Aga, White Nile (I. Trägårdh); Niam Niam. ERITREA: Keren (Beccari). ABYSSINIA: Sancurar to Amarr Burgi; Badditu to Dimé; Dimé to Bass Narok (V. Bottego). SOMALILAND: Giuba River (Elena d'Aosta). BRITISH EAST AFRICA: Bura, Wa-Taita; Kibwezi, Wakamba (C. Alluaud). UGANDA: Kampala (C. C. Gowdey). RHODESIA: Hartley (Zeally); Kazungula (Jallá); Southern Rhodesia (G. Arnold); Lake Ngami. PORTUGUESE EAST AFRICA: Tete (Peters). TRANSVAAL: Pretoria (Distant; Wichgraf); Barberton (Rendall). NATAL: (Haviland). GERMAN SOUTHWEST AFRICA: Okahandja (Casper; Dinter).

#### ***Pædalagus* FOREL**

*Pædalagus* FOREL, in Escherich, 1911, 'Termitenleben auf Ceylon,' p. 217.

Genotype: *Pædalagus escherichi* Forel, 1911.

1. *Pædalagus infimus* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 364, fig. 27 (♀).

*Oligomyrmex infimus* SANTSCHI, 1913, Bull. Soc. Ent. France, p. 459 (♀).

Type locality: Kindia, FRENCH GUINEA (F. Silvestri).

2. *Pædalagus termitolestes* W. M. WHEELER. See p. 177 (♀).

Type locality: Matela, BELGIAN CONGO (Lang, Chapin and J. Bequaert).

### Myrmecini Ashmead

#### Terataner EMERY

*Terataner* EMERY, 1912, Ann. Soc. Ent. Belgique, LVI, p. 103.

Genotype: *Atopomyrmex foreli* Emery, 1899.

1. *Terataner bottegoi* EMERY, 1912, Ann. Soc. Ent. Belgique, LVI, p. 103. SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 72 (♀).

*Atopomyrmex bottegoi* EMERY, 1896, Ann. Mus. Civ. Genova, XXXVII, p. 155, fig. (♂).

*Atopomyrmex bottegi* R. GESTRO, in Vanutelli and Citerni, 1899, 'Seconda Spedizione Böttogo, L'Omo' p. 626, fig. 19 (♀).

Type locality: Lugh, SOMALILAND (V. Bottego).

BRITISH EAST AFRICA: Voi, Taita, 600 m. (Alluaud and Jeannel).

2. *Terataner luteus* EMERY, 1912, Ann. Soc. Ent. Belgique, LVI, p. 103.

*Atopomyrmex luteus* EMERY, 1899, *ibid.*, XLIII, p. 477 (♀). Stirtz, 1910, Mitt. Zool. Mus. Berlin, V, p. 145 (♀).

Type locality: CAMEROON (Conradt).

CAMEROON: Mundame (Conradt).

#### Atopomyrmex ERN. ANDRÉ

*Atopomyrmex* ERN. ANDRÉ, 1889, Rev. d'Ent. Caen, VIII, p. 226.

Genotype: *Atopomyrmex mocquerysi* Ern. André, 1889.

1. *Atopomyrmex mocquerysi* ERN. ANDRÉ, 1889, Rev. d'Ent. Caen, VIII, p. 227 (♀). EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), p. 562 (♀), Pl. xv, fig. 7. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 61. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 83. ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 3 (♀). MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 134. H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 41. EMERY, 1899, Ann. Mus. Civ. Genova, XXXIX, p. 500 (♀). MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicid.,' p. 4 (♀); 1907, Sitzb. Ak. Wiss. Wien, math. naturw. Kl., CXVI, Abt. 1, p. 387. FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 12 (♀). STIRTZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 145 (♀). FOREL, 1911, Rev. Zool. Afr., I, p. 276 (♀). EMERY, 1912, Ann. Soc. Ent. Belgique, LVI, p. 102. FOREL, 1913, Rev. Zool. Afr., II, p. 335 (♀, ♂). BEQUAERT, *ibid.*, p. 428. SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 351 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 71 (♀). See p. 181.

*Atopomyrmex mocquerysi* var. *australis* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 16 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 193 (♀). Same as type, *teste* Arnold in litt.

Type locality: Dakar, SENEGAMBIA (Mocquerys).

DAHOMY: Kotonou (F. Silvestri). SLAVE COAST. FRENCH CONGO: Ogowe (Mocquerys). BELGIAN CONGO: Lukolela to Basoko; Akenge; Medje; Faradje (Lang and Chapin); Matadi; Sankisia (J. Bequaert); Kondué (Luja). ANGOLA.

ANGLO-EGYPTIAN SUDAN: Kaka, White Nile (I. Trägårdh); Khor Attar (F. Werner).  
 ABYSSINIA: Buditu to Bass Narok (V. Bottego). SOMALILAND. BRITISH EAST  
 AFRICA: Voi, Wa-Taïta, 600 m. (C. Alluaud). ZANZIBAR. PORTUGUESE EAST AFRICA:  
 Lobombo Borges, Mozambique (Wilms); Delagoa Bay (Liengme; P. Berthoud);  
 Xalasi (C. W. Howard). NORTH WEST RHODESIA: Mwengwa (H. Dollmann).  
 ZULULAND: (I. Trägårdh).

1. Var. **curvispina** FOREL, 1911, Deutsch. Ent. Zeitschr., p. 311 (♀); 1914,  
 Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 232; 1916, Rev. Suisse Zool., XXIV, p. 419  
 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 191 (♀, ♀).

Type locality: Kondué, BELGIAN CONGO (Luja).

BELGIAN CONGO: Lumbulumbu (H. Kohl). SOUTHERN RHODESIA: Sipapoma,  
 Umgusa River; Malindi; Victoria Falls (G. Arnold). ZULULAND: (I. Trägårdh).

1a. Subsp. **cryptoceroides** (EMERY) FOREL, 1913, Rev. Zool. Afr., II, p. 336  
 (♀). BEQUAERT, *ibid.*, p. 428. FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L,  
 p. 343 (♀). See p. 182.

*Atopomyrmex cryptoceroides* EMERY, 1892, Ann. Soc. Ent. France, LX, (1891),  
 p. 561 (♀), Pl. xv, figs. 5 and 6. DALLA TORRE, 1893, 'Cat. Hym.', VII, p. 60.  
 EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 477 (♀). STITZ, 1910, Mitt.  
 Zool. Mus. Berlin, V, p. 145, fig. 10 (♀). EMERY, 1912, Ann. Soc. Ent. Belgique,  
 LVI, p. 102. SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 351 (♀).  
 STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 374 (♀).

*Atopomyrmex deplanatus* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 133  
 (♀).

Type locality: Assinie, IVORY COAST (C. Alluaud).

FRENCH GUINEA: Kakoulina; Mamou; Kindia (F. Silvestri). SIERRA LEONE:  
 Samlia Falls, River N'Gainie (Mocquers). GOLD COAST. SOUTHERN NIGERIA:  
 Ibadan (F. Silvestri). CAMEROON: Mundame (Conradt). FERNANDO PO: (Con-  
 radt). SPANISH GUINEA: Alen; Uelleburg (Tessmann). FRENCH CONGO: Fort de  
 Possel to Fort Crampel (Schubotz); Kuilu River. BELGIAN CONGO: Kondué (Luja);  
 St. Gabriel; Bengamisa (Kohl); Malela; Elisabethville (J. Bequaert).

1a. Var. **melanoticus** Wm. M. WHEELER. See p. 182 (♀).

Type locality: between Lukolela and Basoko, BELGIAN CONGO (Lang and  
 Chapin).

### Atopula EMERY

*Atopula* EMERY, 1912, Ann. Soc. Ent. Belgique, LVI, p. 104.

*Vollenhovia* subg. *Atopula* EMERY, 1912, *ibid.*, LVI, p. 273.

Genotype: *Atopomyrmex nodifer* Emery, 1901.

1. **Atopula nodifera** EMERY, 1912, Ann. Soc. Ent. Belgique, LVI, p. 104 (♀).  
*Atopomyrmex nodifer* EMERY, 1901, Deutsch. Ent. Zeitschr., p. 115, footnote,  
 fig. (♀, ♀). FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 421 (♀).

Type locality: CAMEROON (L. Conradt).

### Meranoplini Emery

#### Calyptomyrmex EMERY

*Calyptomyrmex* EMERY, 1887, Ann. Mus. Civ. Genova, XXV, p. 472.

Genotype: *Calyptomyrmex beccarii* Emery, 1887.

Subgenus 1. **Calyptomyrmex** EMERY, *sensu stricto*

Subgenotype: same as genotype.

1. **Calyptomyrmex arnoldi** (FOREL) ARNOLD, 1917, Ann. South African Mus., XIV, p. 360 (♀), Pl. VIII, figs. 114, 114a.

*Dicroaspis arnoldi* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 115 (♀).

Type locality: Bulawayo, RHODESIA (G. Arnold).

2. **Calyptomyrmex nummulitica** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 352 (♀).

Type locality: Victoria, CAMEROON (F. Silvestri).

3. **Calyptomyrmex stellatus** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 255, fig. 5 (♀).

Type locality: Gaboon, FRENCH CONGO (F. Faure).

Subgenus 2. **Dicroaspis** EMERY

*Dicroaspis* EMERY, 1908, Ann. Soc. Ent. Belgique, LII, p. 184.

*Calyptomyrmex* subg. *Dicroaspis* EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 15.

Subgenotype: *Dicroaspis cryptocera* Emery, 1908.

4. **Calyptomyrmex (Dicroaspis) claviseta** (SANTSCHI).

*Dicroaspis claviseta* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 27 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 362 (♀):

Type locality: Pietermaritzburg, NATAL (I. Trägårdh).

5. **Calyptomyrmex (Dicroaspis) cryptocerus** (EMERY).

*Dicroaspis cryptocera* EMERY, 1908, Ann. Soc. Ent. Belgique, LII, p. 185, fig. 1 (♀, ♀). WASMANN, 1918, Ent. Mitt. Deutsch. Ent. Mus. Berlin, VII, p. 145.

Type locality: Stanleyville, BELGIAN CONGO (Kohl).

- 5i. Var. **laevidens** SANTSCHI, 1919, Rev. Zool. Afr., VII, p. 88 (♀).

Type locality: Yambuza, BELGIAN CONGO (J. Bequaert).

6. **Calyptomyrmex (Dicroaspis) foreli** EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 15.

*Dicroaspis emeryi* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 262 (♀). SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 311 (♀, ♀). (*nec Calyptomyrmex emeryi* Forel, 1901).

Type locality: Ghinda, ERITREA (K. Escherich; F. Silvestri).

ABYSSINIA: Harar (Reichensperger).

7. **Calyptomyrmex (Dicroaspis) pusillus** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 256 (♀).

Type locality: Gaboon, FRENCH CONGO (F. Faure).

**Meranoplus** F. SMITH

*Meranoplus* F. SMITH, 1854, Trans. Ent. Soc. London, (2) II, p. 224.

*Cryptocerus* (part) GUÉRIN, F. SMITH, LOWNE. *Myrmica* (part) JERDON.

Genotype: *Cryptocerus bicolor* Guérin, 1845.

1. **Meranoplus bondroiti** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 254, fig. 4 (♀).

Type locality: Uzaga, region of the Great Lakes, BELGIAN CONGO (Gérard).

2. **Meranoplus excisus** ARNOLD, 1914, Proc. Rhodesia Sc. Assoc., XIII, p. 29, Pl., fig. 9 (♀); 1917, Ann. South African Mus., XIV, p. 367 (♀).

Type locality: Estcourt, NATAL (R. C. Wroughton).

3. **Meranoplus magrettii** ERN. ANDRÉ, in Magretti, 1884, Ann. Mus. Civ. Genova, XXI, p. 543, fig. A (♀); in Magretti, 1884, Bull. Soc. Ent. Italiana, XV, (1883), p. 245, fig. 1a (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 137. MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 201 (♀; var.?). FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 79. H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 39 (var.?).

Type locality: Suakin, ANGLO-EGYPTIAN SUDAN (Magretti).

SOUTHERN ABYSSINIA: (Ilg). GERMAN EAST AFRICA: Bagamoyo (F. Stuhlmann; var.?).

4. **Meranoplus nanus** ERN. ANDRÉ, 1892, Rev. d'Ent. Caen, XI, p. 55 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 137. SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 351 (♀, ♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 365 (♀).

Type locality: Gaboon, FRENCH CONGO.

FRENCH GUINEA: Kindia (F. Silvestri).

- 4a. Subsp. **inermis** (EMERY).

*Meranoplus inermis* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 41 (♀), Pl. II, fig. 24; 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 15 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 365 (♀).

Type locality: Makapan, TRANSVAAL (E. Simon).

ERITREA: Asmara (F. Silvestri).

- 4b. Subsp. **nanior** FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 12 (♀). SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 506. ARNOLD, 1917, Ann. South African Mus., XIV, p. 366 (♀).

Type locality: Mto-ya-Kifaru, GERMAN EAST AFRICA (Katona).

RHODESIA: Victoria Falls (G. Arnold).

- 4b<sub>1</sub>. Var. **kiboshanus** FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 12 (♀).

Type locality: Kibosho, GERMAN EAST AFRICA (Katona).

- 4c. Subsp. **soriculus** WM. M. WHEELER. See p. 184 (♀, ♀, ♂).

Type locality: Avakubi, BELGIAN CONGO (Lang and Chapin).

BELGIAN CONGO: Medje (Lang and Chapin).

5. **Meranoplus peringueyi** EMERY, 1886, Bull. Soc. Ent. Italiana, XVIII, p. 365 (♀), Pl. XVII, fig. 12. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 137. FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 116 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 368 (♀), Pl. VIII, figs. 115, 115a.

Type locality: Cape of Good Hope (L. Péringuey).

CAPE PROVINCE: Willowmore (H. Brauns).

6. **Meranoplus simoni** EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 41 (♀), Pl. II, fig. 23. ARNOLD, 1917, Ann. South African Mus., XIV, p. 369 (♀).

Type locality: Vrijburg, CAPE PROVINCE (E. Simon).

- 6a. Subsp. **nitidiventris** MAYR, 1901, Ann. Naturh. Hofmus. Wien, XIV, p. 26 (♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 116 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 370 (♀, ♀, ♂).

Type locality: Bothaville, ORANGE FREE STATE (H. Brauns).

RHODESIA: Bulawayo (G. Arnold).

6a. Var. **springvalensis** ARNOLD, 1917, Ann. South African Mus., XIV, p. 372 (♀).

Type locality: Springvale, SOUTHERN RHODESIA (G. Arnold).

6b. Subsp. **suturalis** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 424 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 370 (♀).

Type locality: NATAL (Haviland).

7. **Meranoplus spininodis** ARNOLD, 1917, Ann. South African Mus., XIV, p. 366 (♀).

Type locality: Hillside, Bulawayo, SOUTHERN RHODESIA (G. Arnold).

### Leptothoracini Emery

#### Macromischoides WM. M. WHEELER

*Macromischoides* WM. M. WHEELER, 1920, Psyche, XXVII, p. 53.

Genotype: *Macromischa aculeata* Mayr, 1866.

1. **Macromischoides aculeatus** (MAYR). See p. 189.

*Macromischa aculeata* MAYR, 1866, Sitzb. Ak. Wiss. Wien, LIII, Abt. 1, p. 507 (♀). ERN. ANDRÉ, 1889, Rev. d'Ent. Caen, VIII, p. 224 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 120. ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 3 (♀). MAYR, 1896, Ent. Tidskr., XVII, p. 238. FOREL, 1901, Mitth. Schweiz. Ent. Ges., X, p. 301 (♀). MAYR, 1902, Verh. Zool. Bot. Ges. Wien, p. 292 (♀, ♀, ♂). WASMANN, 1906, Tijdschr. v. Ent., XLVIII, p. 213, Pl. VIII, fig. 3 (nest).

*Tetramorium aculeatum* EMERY, 1896, Bull. Soc. Ent. France, p. 103; 1908, Ann. Soc. Ent. Belgique, LII, p. 187 (♂). FOREL, 1909, ibid., LIII, p. 59 (♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 385 (♀, ♀, ♂). FOREL, 1913, Rev. Suisse Zool., XXI, p. 668 (♀, ♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 350 (♀, ♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 366 (♀). H. SCHMITZ, 1915, Deutsch. Ent. Zeitschr., p. 494. FOREL, 1916, Rev. Suisse Zool., XXIV, p. 420 (♀, ♀, ♂). STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 393 (♀, ♀), Pl. XXI (nest). STRAND, 1917, Ent. Mitt. Deutsch. Ent. Mus. Berlin, VI, p. 41.

Type locality: GOLD COAST.

FRENCH GUINEA: Los Islands (H. Brauns). SIERRA LEONE: (Mocquerys). CAMEROON: (Sjöstedt); Abo (R. Buchholz); Victoria (F. Silvestri); Ekona (Hintz). FRENCH CONGO: Ogowe (Mocquerys); Brazzaville (A. Weiss). BELGIAN CONGO: St. Gabriel (H. Kohl); Kasai, Kondué; Sankuru (Luja); Lukula (Daniel); Mayombe (de Briey); Duma (Schubotz); Kimuenza (Schultze); Bumba (J. Bequaert); Stanleyville; Avakubi; Bafuka; Medje; Leopoldville; Isangi (Lang and Chapin); Lower Congo (Solon); Lingunda.

1. Var. **major** (FOREL).

*Tetramorium aculeatum* var. **major** FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 344 (♀); 1916, Rev. Suisse Zool., XXIV, p. 420 (♀, ♀).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

1. Var. **rubroflavus** (FOREL).

*Tetramorium aculeatum* var. **rubroflava** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 420 (♀).

1. Var. **wasmanni** (FOREL). See p. 190.

*Macromischa wasmanni* FOREL, 1901, Mitth. Schweiz. Ent. Ges., X, p. 300 (♀).



*Tetramorium aculeatum* var. *wasmanni* FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 71 (♀, ♀, ♂). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 385 (♀, ♀). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 420 (♀, ♀).

*Tetramorium aculeatum* subsp. *wasmanni* WASMANN, 1912, Zeitschr. Wiss. Zool., CI, p. 104. REICHENSBERGER, 1915, Ent. Mitt. Deutsch. Ent. Mus. Berlin, IV, p. 125.

Type locality: Léopoldville, BELGIAN CONGO.

FRENCH CONGO: Brazzaville (A. Weiss). BELGIAN CONGO: Sankuru (Luja); St. Gabriel (Kohl); Zambi; Stanleyville (Lang and Chapin).

1a. Subsp. *andricus* (EMERY).

*Tetramorium aculeatum* subsp. *andricum* EMERY, 1908, Ann. Soc. Ent. Belgique, LII, p. 187 (♀, ♀, ♂). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 385 (♀, ♀, ♂). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 350 (♀).

Type locality: Stanleyville, BELGIAN CONGO (Kohl).

FRENCH CONGO: Brazzaville (A. Weiss). BELGIAN CONGO: Kisantu (J. Bequaert).

1a<sub>1</sub>. Var. *gladiator* (SANTSCHI).

*Tetramorium aculeatum* subsp. *andricum* var. *gladiator* SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 248 (♀).

Type locality: Congo da Lemba, BELGIAN CONGO (R. Mayné).

2. *Macromischoides africanus* (MAYR).

*Macromischa africana* MAYR, 1866, Sitzb. Ak. Wiss. Wien, LIII, Abt. 1, p. 507 (♀). DALLA TORRE, 1893, 'Cat. Hym.', VII, p. 120. FOREL, 1901, Mitth. Schweiz. Ent. Ges., X, p. 301 (♀). MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 131 (♀).

*Tetramorium africanum* EMERY, 1896, Bull. Soc. Ent. France, p. 103. SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 385 (♀, ♀). FOREL, 1911, Rev. Zool. Afr., I, p. 279 (♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 366 (♀). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 421 (♀).

Type locality: GOLD COAST.

FRENCH GUINEA: Kodakry (F. Silvestri). NIGERIA: Old Calabar (H. Brauns). CAMEROON: Victoria (F. Silvestri); Mbalmajo to Ekeneli (G. Schwab). FRENCH CONGO: Brazzaville (A. Weiss). BELGIAN CONGO: Congo da Lemba (R. Mayné); St. Gabriel (Kohl).

### **Leptothorax** MAYR

*Leptothorax* MAYR, 1855, Verh. Zool. Bot. Ges. Wien, V, p. 431.

*Formica* (part) FABRICIUS, etc. *Macromischa* EMERY. *Myrmica* (part) NYLANDER, etc. *Stenamma* CURTIS, F. SMITH, PATTON.

Genotype: *Myrmica clypeata* Mayr, 1853.

### **Subgenus Goniothorax** EMERY

*Leptothorax* subg. *Goniothorax* EMERY, 1896, Bull. Soc. Ent. Italiana, XXVIII, p. 26.

Subgenotype: *Leptothorax vicinus* Mayr, 1887.

1. *Leptothorax* (*Goniothorax*) *angulatus* MAYR.

*Leptothorax angulatus* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 739 (♀); 1863, *ibid.*, XIII, p. 426. ERN. ANDRÉ, 1883, 'Spec. Hym. Europ. Algérie,' II,

p. 295 (♀). EMERY, 1891, 'Explor. Tunisie, Fourmis,' p. 5. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 123. FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 233 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 107 (♀, ♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 258 (♀), Pl. v, figs. 56, 56a.

Type locality: Sinai Peninsula (R. v. Frauenfeld).

TUNIS. CENTRAL UGANDA: (C. Alluaud). SOUTHERN RHODESIA: Khami River; Matoppo Hills (G. Arnold).

1a. Subsp. **concolor** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 107, fig. 15 (♀, ♀). EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 16 (♀, ♀, ♂).

Type locality: Mombasa, BRITISH EAST AFRICA (Alluaud and Jeannel).

ERITREA: Mayabal (F. Silvestri).

1b. Subsp. **ilgi** FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 82 (♀). SANTSCHI, 1912, Bull. Soc. Hist. Nat. Afr. Nord, IV, p. 148 (♀, ♀).

Type locality: SOUTHERN ABYSSINIA (Ilg).

FRENCH SOMALILAND: Obock (Maindron).

2. **Leptothorax (Goniothorax) denticulatus** MAYR.

*Leptothorax denticulatus* MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 5 (♀, ♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 260 (♀, ♀).

Type locality: Port Elizabeth, CAPE PROVINCE (H. Brauns).

3. **Leptothorax (Goniothorax) evelynæ** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 423 (♀, ♀).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

4. **Leptothorax (Goniothorax) grisoni** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 423 (♀, ♂).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

5. **Leptothorax (Goniothorax) innocens** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 423 (♀).

*Tetramorium (Leptothorax?) innocens* FOREL, 1913, Rev. Zool. Afr., II, p. 317 (♀). BEQUAERT, *ibid.*, p. 424.

Type locality: Elisabethville, BELGIAN CONGO (J. Bequaert).

6. **Leptothorax (Goniothorax) latinodis** MAYR. See p. 1029.

*Leptothorax latinodis* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 130 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 259 (♀).

Type locality: Delagoa Bay, PORTUGUESE EAST AFRICA (H. Brauns).

### **Ocymyrmecini** Emery

#### **Ocymyrmex** EMERY

*Ocymyrmex* EMERY, 1886, Bull. Soc. Ent. Italiana, XVIII, p. 364.

Genotype: *Ocymyrmex barbiger* Emery, 1886.

1. **Ocymyrmex barbiger** EMERY, 1886, Bull. Soc. Ent. Italiana, XVIII, p. 364 (♀, ♂), Pl. XVII, figs. 9-11. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 72. EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 26. ARNOLD, 1916, Ann. South African Mus., XIV, p. 199 (♀, ♂), Pl. v, fig. 53.

*Ocymyrmex barbatus* EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 117 (♀).

Type locality: Cape of Good Hope (L. Péringuey).

CAPE PROVINCE: Cape Town (E. Simon); Orange River (G. Arnold). BECHUANALAND: Magalapye (G. Arnold).

2. **Ocymyrmex laticeps** FOREL, 1901, Mitth. Schweiz. Ent. Ges., X, p. 306 (♀); in Baum, 1903, 'Kunene-Sambesi Expedition,' p. 561 (♀).

Type locality: between the Cubango and Cuito Rivers, MOSSAMEDES (Baum and Van der Kellen).

3. **Ocymyrmex picardi** FOREL, 1901, Mitth. Schweiz. Ent. Ges., X, p. 306 (♀); in Baum, 1903, 'Kunene-Sambesi Expedition,' p. 561 (♀); in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 13 (♀). ARNOLD, 1916, Ann. South African Mus., XIV, p. 199 (♀).

Type locality: between the Cubango and Cuito Rivers, MOSSAMEDES (Baum and Van der Kellen).

BECHUANALAND: Severelela; Severelela to Kooa (L. Schultze).

4. **Ocymyrmex robecchii** EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, pp. 114 and 116, fig. (♀). FOREL, 1892, Mitth. Schweiz. Ent. Ges., VIII, p. 352 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 72. EMERY, 1895, Ann. Mus. Civ. Genova, XXXV, p. 178.

Type locality: Webi, ABYSSINIA (Bricchetti-Robecchi).

SOMALILAND: (C. Keller); Erdal (Pavesi). ABYSSINIA: Middle Ganale (V. Bottego).

4a. Subsp. **nitidulus** EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 116 (♀); 1896, *ibid.*, XXXVII, p. 157 (♀, ♂).

*Ocymyrmex robecchii* var. *nitidulus* EMERY, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 83.

*Ocymyrmex nitidulus* DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 72.

Type locality: Obbia, SOMALILAND (Bricchetti-Robecchi).

ABYSSINIA: Junction of Webi and Ganale Rivers (V. Bottego); southern Abyssinia (Ilg). SOMALILAND: Lugh (V. Bottego).

5. **Ocymyrmex weitzackeri** EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 116, footnote (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 72. EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 26 (♀, ♂). MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru., etc.,' II, 8, p. 12 (♀).

*Ocymyrmex weitzackeri* ARNOLD, 1916, Ann. South African Mus., XIV, p. 195 (♀, ♂), Pl. v, fig. 54.

Type locality: Leribe, BASUTOLAND (Weitzacker).

CAPE PROVINCE: Vrijburg; Kimberley (E. Simon). TRANSVAAL: Makapan; Hamman's Kraal (E. Simon). ORANGE FREE STATE. GERMAN EAST AFRICA: Ngarena-Nyuki, Meru Plain (Sjöstedt).

5i. Var. **arnoldi** (FOREL).

*Ocymyrmex arnoldi* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 138 (♀, ♂).

*Ocymyrmex weitzackeri* subsp. *arnoldi* FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 213 (♀).

*Ocymyrmex weitzackeri* subsp. *abdominalis* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 16 (♀).

*Ocymyrmex weitzackeri* var. *arnoldi* ARNOLD, 1916, Ann. South African Mus., XIV, p. 197 (♀, ♂), Pl. v, figs. 52, 52a, and 55.

Type locality: Bulawayo, RHODESIA (G. Arnold).

ZULULAND: Entendweni (I. Trägårdh). SOUTHERN RHODESIA: common (G. Arnold).

5<sub>2</sub>. Var. **foreli** (ARNOLD).

*Ocymyrmex weitzæckeri* var. *foreli* ARNOLD, 1916, Ann. South African Mus., XIV, p. 197 (♀).

Type locality: Redbank, SOUTHERN RHODESIA (G. Arnold).

RHODESIA: Victoria Falls (G. Arnold).

5a. Subsp. **fortior** SANTSCHI, 1911, Rev. Zool. Afr., I, p. 209 (♀).

Type locality: Cucala, BENGUELA (J. Cruchet).

5b. Subsp. **hirsutus** FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 13 (♀).

*Ocymyrmex weitzæckeri* subsp. *hirsutus* ARNOLD, 1916, Ann. South African Mus., XIV, p. 198 (♀).

Type locality: Severelela, BECHUANALAND (L. Schultze).

BECHUANALAND: KOOA (L. Schultze).

5b<sub>1</sub>. Var. **flaviventris** (SANTSCHI).

*Ocymyrmex hirsutus* var. *flaviventris* SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 431 (♀); 1915, Ann. Soc. Ent. France, LXXXIV, p. 254 (♀).

Type locality: Windhoek, GERMAN SOUTHWEST AFRICA.

Originally described, by error, from German East Africa.

5c. Subsp. **transversus** SANTSCHI, 1911, Rev. Zool. Afr., I, p. 209 (♀).

Type locality: Cucala, BENGUELA (J. Cruchet).

5d. Subsp. **wroughtoni** FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 13 (♀).

*Ocymyrmex weitzæckeri* subsp. *wroughtoni* ARNOLD, 1916, Ann. South African Mus., XIV, p. 198 (♀).

Type locality: NATAL (R. C. Wroughton).

5d<sub>1</sub>. Var. **micans** (FOREL).

*Ocymyrmex weitzæckeri* var. *micans* FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 12 (♀).

*Ocymyrmex weitzæckeri* subsp. *wroughtoni* var. *micans* ARNOLD, 1916, Ann. South African Mus., XIV, p. 198 (♀).

Type locality: Okahandja, GERMAN SOUTHWEST AFRICA (Peters).

**Tetramoriini** Emery**Tetramorium** MAYR

*Tetramorium* MAYR, 1855, Verh. Zool. Bot. Ges. Wien, V, p. 423.

*Tetrogmus* ROGER, 1857, Berlin. Ent. Zeitschr., I, p. 10.

*Atta* ILLIGER. *Formica* LINNÆUS, etc. *Leptothorax* F. SMITH. *Myrmica* LATREILLE, etc.

Genotype: *Formica cæspitum* Linnæus, 1758.

1. **Tetramorium arnoldi** (FOREL) EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 19, footnote.

*Triglyphothrix arnoldi* FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 220 (♀).

*Tetramorium (Triglyphothrix) arnoldi* ARNOLD, 1917, Ann. South African Mus., XIV, p. 338 (♀, ♀), Pl. VII, fig. 93.

Type locality: Shiloh, SOUTHERN RHODESIA (G. Arnold).

RHODESIA: Bulawayo (G. Arnold).

2. **Tetramorium bacchus** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 426 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 309 (♀).  
Type locality: NATAL (Haviland).
3. **Tetramorium bequaerti** FOREL, 1913, Rev. Zool. Afr., II, p. 318 (♀). BEQUAERT, *ibid.*, p. 424. ARNOLD, 1917, Ann. South African Mus., XIV, p. 281 (♀). SANTSCHI, 1918, Bull. Soc. Hist. Nat. Afr. Nord, IX, p. 122 (♀).  
Type locality: Lake Kabwe, BELGIAN CONGO (J. Bequaert).
- 3a. Subsp. **bulawayense** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 119 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 281 (♀, ♀). SANTSCHI, 1918, Bull. Soc. Hist. Nat. Afr. Nord, IX, p. 122 (♀).  
Type locality: Bulawayo, RHODESIA (Arnold).
- 3a<sub>1</sub>. Var. **bruni** SANTSCHI, 1918, Bull. Soc. Hist. Nat. Afr. Nord, IX, p. 122 (♀).  
*Tetramorium bequaerti* subsp. *bruni* SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), p. 285 (♀).  
Type locality: Hillside, SOUTHERN RHODESIA (Arnold).
4. **Tetramorium caespitum** (LINNÆUS) MAYR, 1855, Verh. Zool. Bot. Ges. Wien, V, p. 426 (♀, ♀, ♂).  
*Formica caespitum* LINNÆUS, 1758, 'Syst. Nat.', Ed. 10, I, p. 581 (♀).  
Type locality: "Europa."  
EUROPE, tending to become circumpolar.
- 4i. Var. **nefasitense** FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 260 (♀).  
Type locality: Nefasit, ERITREA (K. Escherich).
- 4a. Subsp. **altivagans** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 103 (♀).  
Type locality: Kinangop, Aberdare Mts., 3100 m., BRITISH EAST AFRICA (Alluaud and Jeannel).
- 4b. Subsp. **nautarum** SANTSCHI, 1918, Bull. Soc. Hist. Nat. Afr. Nord, IX, p. 156 (♀).  
Type locality: ANNOBON ISLAND (Reichensperger).
- 4c. Subsp. **schultzei** FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 19 (♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 367 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 331 (♀).  
Type locality: Kgokong to Kang, BECHUANALAND (L. Schultze).  
CAPE PROVINCE: Stellenbosch.
5. **Tetramorium camerunense** MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 129 (♀).  
Type locality: CAMEROON (H. Brauns).
- 5<sub>1</sub>. Var. **gegaimi** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 421 (♀, ♀).  
Type locality: St. Gabriel, BELGIAN CONGO (Kohl).
- 5<sub>2</sub>. Var. **waelbroeki** FOREL, 1909, Ann. Soc. Ent. Belgique, LHI, p. 53 (♀).  
*Tetramorium camerunense* var. *woelbroeckii* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 367, fig. 29 (♀).  
Type locality: Kinshasa, BELGIAN CONGO (Waelbroeck).  
SOUTHERN NIGERIA: Lagos (F. Silvestri).
6. **Tetramorium capense** MAYR, 1865, 'Reise Novara, Zool.,' II, Formicidæ, p. 89 (♀); 1870, Verh. Zool. Bot. Ges. Wien, XX, p. 972 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 133. EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 36 (♀, ♀,

♂). SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 435; 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 366 (♀, ♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 310 (♀, ♀, ♂).

*Tetramorium braunsi* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 119 (♀).

*Tetramorium capense* var. *braunsi* FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 220. ARNOLD, 1917, Ann. South African Mus., XIV, p. 311 (♀).

Type locality: Cape of Good Hope (Novara Expedition).

CAPE PROVINCE: Cape Town (E. Simon); Constantia; Willowmore (H. Brauns); East London.

7. ***Tetramorium coloreum*** MAYR, 1900, Ent. Tidskr., XXI, p. 273 (♀).

Type locality: Mungo River, CAMEROON (R. Buchholz).

71. Var. ***postpetiolatum*** SANTSCHI, 1919, Rev. Zool. Afr., VII, p. 88 (♀).

Type locality: Penge, BELGIAN CONGO (J. Bequaert).

8. ***Tetramorium doriae*** EMERY, 1881, Ann. Mus. Civ. Genova, XIV, p. 530 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 133.

Type locality: Assab, ERITREA (Doria and Beccari).

9. ***Tetramorium emeryi*** MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 23 (♀, ♀, ♂). ARNOLD, 1917, Ann. South African Mus., XIV, p. 300 (♀, ♀, ♂).

Type locality: Port Elizabeth, CAPE PROVINCE (H. Brauns).

9a. Subsp. ***cristulatum*** FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 218 (♀, ♂). ARNOLD, 1917, Ann. South African Mus., XIV, p. 302 (♀, ♀, ♂).

Type locality: Willowmore, CAPE PROVINCE (H. Brauns).

10. ***Tetramorium ericae*** ARNOLD, 1917, Ann. South African Mus., XIV, p. 332 (♀).

Type locality: Hillside, Bulawayo, SOUTHERN RHODESIA (G. Arnold).

11. ***Tetramorium frenchi*** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 229 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 285 (♀).

Type locality: Krantzkloof, Durban, NATAL (Marley).

12. ***Tetramorium gladstonei*** FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 219 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 284 (♀).

*Tetramorium sericeiventris* subsp. *gladstonei* SANTSCHI, 1918, Bull. Soc. Hist. Nat. Afr. Nord, IX, p. 125 (♀) (by misprint).

Type locality: Shiloh, SOUTHERN RHODESIA (G. Arnold).

12. Var. ***sepositum*** SANTSCHI, 1918, Bull. Soc. Hist. Nat. Afr. Nord, IX, pp. 125 and 131 (♀).

Type locality: Victoria Falls, RHODESIA (G. Arnold).

RHODESIA: Bulawayo (G. Arnold).

13. ***Tetramorium gracile*** FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 81 (♀); 1907, Rev. d'Ent. Caen, XXVI, p. 136 (♂?).

Type locality: SOUTHERN ABYSSINIA (Hlg).

ABYSSINIA: Adis Abeba (de Rothschild).

14. ***Tetramorium grandinode*** SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 308 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 312 (♀).

Type locality: Cape of Good Hope.

14. Var. ***hopense*** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 223 (♀, ♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 313 (♀, ♀), Pl. VII, figs. 103, 103a, 103b.

Type locality: Hopetown, CAPE PROVINCE.

15. **Tetramorium grassii** EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 37 (♀, ♀). MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 25 (♀, ♀). FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 226 (♀, ♀).

*Tetramorium grassii* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 366 (♀, ♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 304 (♀, ♀), Pl. VII, fig. 105.

Type locality: Cape Town, CAPE PROVINCE (E. Simon).

CAPE PROVINCE: Kimberley (E. Simon); Table Mt., 1500 ft. (G. Arnold); Port Elizabeth (H. Brauns); Constantia.

15<sub>1</sub>. Var. **laevigatum** MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 25 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 305 (♀).

Type locality: Port Elizabeth, CAPE PROVINCE (H. Brauns).

15<sub>2</sub>. Var. **simulans** SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 24 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 305 (♀).

Type locality: Richmond, NATAL (I. Trägårdh).

16. **Tetramorium guineense** (FABRICIUS) MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 740; 1863, *ibid.*, XIII, p. 456. ROGER, 1863, 'Verzeich. Formicid.,' p. 27. MAYR, 1870, Verh. Zool. Bot. Ges. Wien, XX, p. 972 (♀). BLACKBURN and KIRBY, 1880, Ent. Monthly Mag., XVII, p. 88. ERN. ANDRÉ, 1883, 'Spec. Hym. Europ. Algérie,' II, pp. 288, 289, 290 (♀, ♀, ♂). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 133. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 130. FOREL, 1907, Rev. d'Ent. Caen, XXVI, p. 135 (♀); 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 260 (♀); 1913, Rev. Zool. Afr., II, p. 319 (♀). BEQUAERT, *ibid.*, p. 425. EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 4 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 306 (♀). See pp. 192 and 1030.

*Formica guineensis* FABRICIUS, 1793, 'Ent. Syst.,' II, p. 357 (♀). LATRÉILLE, 1802, 'Hist. Nat. Fourmis,' p. 285 (♀). FABRICIUS, 1804, 'Syst. Piez.,' p. 404 (♀). F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 32.

*Myrmica bicarinata* NYLANDER, 1847, Acta Soc. Sc. Fennicae, II, p. 1061 (♀, ♀). F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 130.

*Myrmica cariniceps* GUÉRIN, 1852, Rev. Mag. Zool., (2) IV, p. 79 (♀).

*Myrmica kollari* MAYR, 1853, Verh. Zool. Bot. Ges. Wien, III, p. 283 (♀, ♀, ♂).

*Tetramorium kollari* MAYR, 1855, *ibid.*, V, p. 425 (♀, ♀, ♂). SICHEL, 1856, Ann. Soc. Ent. France, (3) IV, Bull., p. xxiv. WHITE, 1883, 'Ants and Their Ways,' p. 262 (♀).

*Tetramorium cariniceps* ROGER, 1861, Berlin. Ent. Zeitschr., V, p. 171.

*Myrmica reticulata* F. SMITH, 1862, Trans. Ent. Soc. London, (3) I, p. 33 (♀); 1871, Ent. Annual for 1871, p. 60.

*Myrmica guineensis* ROGER, 1862, Berlin. Ent. Zeitschr., VI, p. 293.

*Myrmica (Tetramorium) kollari* F. SMITH, 1871, Ent. Annual for 1871, p. 60.

Type locality: Guinea (Isert).

Tropicopolitan. FRENCH GUINEA: Los Islands. ERITREA: Nefasit (F. Silvestri). ABYSSINIA: western part (Ilg); confluent of the Akaki River (de Rothschild). BELGIAN CONGO: Elisabethville (J. Bequaert); Ngayu (Lang and Chapin).

16<sub>1</sub>. Var. **erectum** EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 37 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 307 (♀).

Type locality: Vrijburg, CAPE PROVINCE (E. Simon).

162. Var. **phasias** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 226 (♀).  
ARNOLD, 1917, Ann. South African Mus., XIV, p. 307 (♀).

Type locality: Durban, NATAL (C. B. Cooper).

16a. Subsp. **cristatum** (STITZ) FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 117 (♀).

*Tetramorium guineense* var. *cristatum* STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 144 (♀).

Type locality: Bismarckburg, Togo (Conradt).

RHODESIA: Bulawayo (G. Arnold).

16b. Subsp. **medje** WM. M. WHEELER. See p. 192 (♀).

Type locality: Medje, BELGIAN CONGO (Lang and Chapin).

16c. Subsp. **peutli** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 419 (♀, ♀).

Type locality: BELGIAN CONGO (H. Kohl).

16d. Subsp. **striatum** (STITZ) ARNOLD, 1917, Ann. South African Mus., XIV, p. 308 (♀, ♀, ♂).

*Tetramorium guineense* var. *striatum* STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 144 (♀).

Type locality: Bismarckburg, Togo (Conradt).

SOUTHERN RHODESIA: (G. Arnold).

17. **Tetramorium humile** SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 434 (♀, ♀).

Type locality: Morogoro, GERMAN EAST AFRICA.

18. **Tetramorium intextum** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 104, fig. 14 (♀); 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 506, fig. A (♀).

Type locality: Blue Post Hotel, Kikuyu, 1520 m., BRITISH EAST AFRICA (Alluaud and Jeannel).

18i. Var. **cataractæ** SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 506, fig. B (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 322 (♀).

Type locality: Victoria Falls, RHODESIA (G. Arnold).

19. **Tetramorium jauresi** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 226 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 296 (♀), Pl. VII, fig. 99.

Type locality: Park Rynie, NATAL (Marley).

20. **Tetramorium joffrei** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 228 (♀, ♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 303 (♀, ♀), Pl. VII, fig. 97.

Type locality: Durban, NATAL (G. Arnold).

20i. Var. **algoa** ARNOLD, 1917, Ann. South African Mus., XIV, p. 304 (♀, ♀).

Type locality: Port Elizabeth, CAPE PROVINCE (H. Brauns).

21. **Tetramorium lævithorax** EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 39 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 286 (♀), Pl. VIII, figs. 110, 110a.

Type locality: Pietermaritzburg, NATAL (Weitzcker).

CAPE PROVINCE: Port Elizabeth (H. Brauns).

22. **Tetramorium lobulicorne** SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 504 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 298 (♀, ♀, ♂).

Type locality: Bulawayo, RHODESIA (G. Arnold).



23. **Tetramorium longicorne** FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 13 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 119 (♀); 1913, Deutsch. Ent. Zeitschr., Beih., p. 219 (♀); 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 226 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 283 (♀), Pl. vii, figs. 96, 96a.

Type locality: Mto-ya-Kifaru, GERMAN EAST AFRICA (Katona).

RHODESIA: Bulawayo (G. Arnold).

24. **Tetramorium longoi** FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 344 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 321 (♀).

Type locality: George, CAPE PROVINCE (H. Brauns).

25. **Tetramorium luteipes** SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 24, footnote.

*Tetramorium grassi* subsp. *luteipes* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 383, fig. 11 (♀, ♀, ♂).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

26. **Tetramorium meressei** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 422 (♀). See p. 192.

Type locality: BELGIAN CONGO (Kohl).

BELGIAN CONGO: Masaki between Masisi and Walikale (J. Bequaert).

27. **Tetramorium microgyna** SANTSCHI, 1918, Bull. Soc. Hist. Nat. Afr. Nord, IX, p. 132 (♀).

Type locality: NATAL (Haviland).

28. **Tetramorium miserabile** SANTSCHI, 1918, Bull. Soc. Hist. Nat. Afr. Nord, IX, p. 153 (♀).

Type locality: BRITISH EAST AFRICA (Reichensperger).

29. **Tetramorium neuvillei** FOREL, 1907, Rev. d'Ent. Caen, XXVI, p. 135 (♀).

Type locality: Diré Daa, ABYSSINIA (de Rothschild).

30. **Tetramorium oculatum** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 116 (♀).

Type locality: Redbank, RHODESIA (G. Arnold).

31. **Tetramorium pauper** FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 14 (♀).

Type locality: Mto-ya-Kifaru, GERMAN EAST AFRICA (Katona).

31a. Subsp. **nigrum** FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 15 (♀).

Type locality: Mto-ya-Kifaru, GERMAN EAST AFRICA (Katona).

31b. Subsp. **transformans** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 104 (♀).

Type locality: Shimoni, BRITISH EAST AFRICA (Alluaud and Jeannel).

32. **Tetramorium popovici** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 230 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 311 (♀, ♀).

Type locality: Table Mt., 1500 ft., CAPE PROVINCE (G. Arnold).

33. **Tetramorium pusillum** EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 38 (♀, ♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 382, fig. 10a (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 323 (♀, ♀).

Type locality: Cape Town, CAPE PROVINCE (E. Simon).

33i. Var. **anxium** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 365, fig. 28 (♀, ♀).

Type locality: Camayenne, FRENCH GUINEA (F. Silvestri).

332. Var. **bantouanum** SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 382, fig. 10b (♀, ♂).

Type locality: Mbamu, FRENCH CONGO (A. Weiss).

333. Var. **exoletum** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 366 (♀).

Type locality: Lagos, SOUTHERN NIGERIA (F. Silvestri).

334. Var. **hemisi** Wm. M. WHEELER. See p. 193 (♀).

Type locality: Niangara, BELGIAN CONGO (Lang and Chapin).

335. Var. **mossamedense** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 223. ARNOLD, 1917, Ann. South African Mus., XIV, p. 324 (♀).

*Tetramorium caespitum* var. *mossamedense* FOREL, 1901, Mitth. Schweiz. Ent. Ges., X, p. 306 (♀); in Baum, 1903, 'Kunene-Sambesi Expedition,' p. 560 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 117.

Type locality: between the Cubango and Cuito Rivers, MOSSAMEDES (Baum and Van der Kellen).

RHODESIA: Bulawayo (G. Arnold).

336. Var. **triste** (SANTSCHI).

*Tetramorium pusillum* subsp. *mosamedense* var. *tristis* SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), p. 285 (♀).

Type locality: Bulawayo, SOUTHERN RHODESIA (G. Arnold).

33a. Subsp. **ghindanum** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 223. EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 4 (♀).

*Tetramorium caespitum* subsp. *ghindanum* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 260 (♀).

Type locality: Ghinda, ERITREA (K. Escherich; F. Silvestri).

33b. Subsp. **ladismithense** (FOREL) ARNOLD, 1917, Ann. South African Mus., XIV, p. 325 (♀).

*Tetramorium caespitum* subsp. *ladismithensis* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 117 (♀).

*Tetramorium pusillum* subsp. *ladysmithensis* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 223.

Type locality: Ladismith, CAPE PROVINCE (H. Brauns).

33c. Subsp. **tablense** (FOREL) ARNOLD, 1917, Ann. South African Mus., XIV, p. 326 (♀, ♀, ♂).

*Tetramorium pusillum* var. *tablensis* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 223 (♀, ♀, ♂).

Type locality: Table Mt., CAPE PROVINCE (G. Arnold).

34. **Tetramorium pygmæum** EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 371 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 134. EMERY, 1901, Bull. Soc. Ent. Italiana, XXXIII, p. 62 (♀, ♂); 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 17 (♀).

Type locality: Keren, ERITREA (Beccari).

ERITREA: Bizen (A. Fiori); Massaua (Belli).

35. **Tetramorium quadridentatum** STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 144 (♀).

Type locality: Mundame, CAMEROON (Conradt).

36. **Tetramorium quadrispinosum** EMERY, 1886, Bull. Soc. Ent. Italiana, XVIII, p. 362 (♀), Pl. XVII, fig. 8. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 134.

FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 80. EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 36. WASMANN, 1899, Notes Leyden Mus., XXI, p. 51; 1911, Tijdschr. v. Ent., LIV, p. 201; 1912, Zeitschr. Wiss. Zool., CI, p. 107. FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 226 (♀). REICHENSBERGER, 1915, Med. Göteborgs Mus. Zool. Afd., V, pp. 45 and 73. ARNOLD, 1917, Ann. South African Mus., XIV, p. 277 (♀). SANTSCHI, 1918, Bull. Soc. Hist. Nat. Afr. Nord, IX, p. 122 (♀). See p. 1030.

Type locality: Cape of Good Hope (L. Péringuey).

CAPE PROVINCE: Table Mt. (G. Arnold); Cape Town (E. Simon); Willowmore (H. Brauns). NATAL: (R. C. Wroughton). DELAGOA: (Liengme).

36a. Subsp. **elegans** SANTSCHI, 1918, Bull. Soc. Hist. Nat. Afr. Nord, IX, pp. 122 and 125 (♀).

Type locality: Willowmore, CAPE COLONY (G. Arnold).

36b. Subsp. **eudoxium** (FOREL) SANTSCHI, 1918, Bull. Soc. Hist. Nat. Afr. Nord, IX, p. 122 (♀).

*Tetramorium blochmanni* subsp. *continentis* var. *eudoxia* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 231 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 280 (♀).

Type locality: Willowmore, CAPE PROVINCE (G. Arnold).

37. **Tetramorium semireticulatum** ARNOLD, 1917, Ann. South African Mus., XIV, p. 319 (♀, ♂).

Type locality: Hillside District, Bulawayo, SOUTHERN RHODESIA (G. Arnold).

38. **Tetramorium sericeiventre** EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 370 (♀). MAGRETTI, 1884, *ibid.*, XXI, p. 539 (♀). ERN. ANDRÉ, 1885, 'Spec. Hym. Europ. Algérie,' II, Suppl., p. 851 (♀) (p. 19 of reprint). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 134. EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 37; 1896, Ann. Mus. Civ. Genova, XXXVII, p. 158 (♀); 1909, Deutsch. Ent. Zeitschr., p. 697, fig. 1 (♀). FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 261 (♀, ♀). GESTRO, 1911, Bull. Soc. Ent. Italiana, XLI, (1909), p. 258. FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 266 (♀); 1913, Rev. Zool. Afr., II, p. 319 (♀). BEQUAERT, *ibid.*, p. 424. SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 101 (♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 366 (♀). EMERY, 1915, *ibid.*, X, p. 4 (♀, ♀). SANTSCHI, 1918, Bull. Soc. Hist. Nat. Afr. Nord, IX, pp. 123 and 125 (♀). See pp. 191 and 1030.

*Tetramorium sericeiventre* MAGRETTI, 1884, Bull. Soc. Ent. Italiana, XV, (1883), p. 244 (♀).

Type locality: Sciotel, ERITREA (Beccari).

FRENCH GUINEA: Konakry (F. Silvestri). SIERRA LEONE. NIGERIA: Old Calabar (Bates); Ibadan (F. Silvestri). BELGIAN CONGO: Thysville; Bukama (J. Bequaert); Garamba (Lang and Chapin). GERMAN EAST AFRICA: Moschi, Mt. Kilimandjaro, 1120 m. (Alluaud and Jeannel). SOMALILAND: Matagoi to Lugh (V. Bottego). ERITREA: Asmara (K. Escherich); Nefasit (K. Escherich; F. Silvestri); Ghinda (F. Silvestri). ANGLO-EGYPTIAN SUDAN: El Hefera, Settit (Magretti).

38i. Var. **arenarium** SANTSCHI, 1918, Bull. Soc. Hist. Nat. Afr. Nord, IX, pp. 123 and 126 (♀).

Type locality: Kairouan, TUNIS (Santschi).

ALGERIA. SENEGAMBIA: Fello (Claveau). ABYSSINIA: Harar (Reichensperger).

38<sub>2</sub>. Var. **bipartitum** SANTSCHI, 1918, Bull. Soc. Hist. Nat. Afr. Nord, IX, pp. 123 and 126 (♀).

Type locality: BRITISH EAST AFRICA (Le Mout).

38<sub>3</sub>. Var. **debile** FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 80 (♀). SANTSCHI, 1918, Bull. Soc. Hist. Nat. Afr. Nord, IX, p. 124 (♀).

Type locality: SOUTHERN ABYSSINIA (Ilg).

38<sub>4</sub>. Var. **gamai** SANTSCHI, 1918, Bull. Soc. Hist. Nat. Afr. Nord, IX, pp. 124 and 128 (♀).

Type locality: Gwaai, RHODESIA (G. Arnold).

38<sub>5</sub>. Var. **hori** SANTSCHI, 1918, Bull. Soc. Hist. Nat. Afr. Nord, IX, pp. 123 and 125 (♀).

*Tetramorium sericeiventris* KARAWAIEW, 1911, Rev. Russe Ent., XI, p. 8 (♀).

Type locality: Khartum, ANGLO-EGYPTIAN SUDAN (Karawaiew).

38<sub>6</sub>. Var. **jasonis** SANTSCHI, 1918, Bull. Soc. Hist. Nat. Afr. Nord, IX, pp. 123 and 127 (♀, ♀).

Type locality: Jacqueline, IVORY COAST (Lohier).

IVORY COAST: Dimbroko (Le Mout).

38<sub>7</sub>. Var. **mundum** SANTSCHI, 1918, Bull. Soc. Hist. Nat. Afr. Nord, IX, pp. 123 and 127 (♀).

Type locality: Kakoulima, FRENCH GUINEA (F. Silvestri).

38<sub>8</sub>. Var. **nigriventris** (STITZ) SANTSCHI, 1918, Bull. Soc. Hist. Nat. Afr. Nord, IX, pp. 123 and 126 (♀).

*Tetramorium blochmanni* var. *nigriventris* STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 144 (♀); 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08),' III, p. 388 (♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 366 (♀). STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 393 (♀).

Type locality: Misaböhe, Togo (Smend).

FRENCH GUINEA: Konakry; Kakoulima (F. Silvestri). FRENCH CONGO: Fort de Possel to Fort Crampel; Fort Crampel (Schubotz). BELGIAN CONGO: Kassenje, western shore of Lake Albert (Schubotz). NIGERIA: Ibadan (F. Silvestri).

38<sub>9</sub>. Var. **vascoi** SANTSCHI, 1918, Bull. Soc. Hist. Nat. Afr. Nord, IX, pp. 123 and 128 (♀).

Type locality: Bulawayo, RHODESIA (G. Arnold).

38<sub>a</sub>. Subsp. **cinnamomeum** "ARNOLD" SANTSCHI, 1918, Bull. Soc. Hist. Nat. Afr. Nord, IX, p. 124 (♀).

Type locality: RHODESIA.

I have not found a form of *Tetramorium* described under the name "*cinnamomeum*" by Arnold.

38<sub>b</sub>. Subsp. **continentis** (FOREL) SANTSCHI, 1918, Bull. Soc. Hist. Nat. Afr. Nord, IX, pp. 124 and 130 (♀). See p. 191.

*Tetramorium blochmanni* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 36. FOREL, 1901, Mitth. Schweiz. Ent. Ges., X, p. 311; in Baum, 1903, 'Kunene-Sambesi Expedition,' p. 564; in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 19 (♀, ♀, ♂).

*Tetramorium blochmanni* subsp. *continentis* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 426 (♀); 1913, *ibid.*, LVII, p. 118 (♀, ♀); 1913, Rev. Zool. Afr., II,

p. 319 (♀). BEQUAERT, *ibid.*, p. 424. ARNOLD, 1917, *Ann. South African Mus.*, XIV, p. 278 (♀, ♀, ♂). WASMANN, 1918, *Tijdschr. v. Ent.*, LX, (1917), p. 396.

Type locality: NATAL (R. C. Wroughton; Haviland).

BECHUANALAND: Kang to Kgokong; Severelela (L. Schultze). GERMAN SOUTHWEST AFRICA: Kubub (L. Schultze). TRANSVAAL: Hamman's Kraal; Hebron (E. Simon). NATAL: (Weitzecker). BASUTOLAND: (Weitzecker). MOSSAMEDES: between the Cubango and Cuito Rivers (Baum and Van der Kellen). RHODESIA: Bulawayo (G. Arnold). BELGIAN CONGO: Elisabethville; Sankisia (J. Bequaert); Zambi (Lang, Chapin and Bequaert).

38b<sub>1</sub>. Var. **georgei** SANTSCHI, 1918, *Bull. Soc. Hist. Nat. Afr. Nord*, IX, pp. 124 and 131 (♀).

Type locality: Bulawayo, RHODESIA (G. Arnold).

38b<sub>2</sub>. Var. **platonis** SANTSCHI, 1918, *Bull. Soc. Hist. Nat. Afr. Nord*, IX, pp. 124 and 130 (♀).

Type locality: BASUTOLAND (R. C. Wroughton).

38c. Subsp. **femoratum** EMERY, 1895, *Ann. Soc. Ent. France*, LXIV, p. 37 (♀). ARNOLD, 1917, *Ann. South African Mus.*, XIV, p. 294 (♀). SANTSCHI, 1918, *Bull. Soc. Hist. Nat. Afr. Nord*, IX, pp. 124 and 128 (♀).

Type locality: Makapan, TRANSVAAL (E. Simon).

38c<sub>1</sub>. Var. **collutum** SANTSCHI, 1918, *Bull. Soc. Hist. Nat. Afr. Nord*, IX, pp. 124 and 129 (♀).

Type locality: Durban, NATAL (Demarchi).

38c<sub>2</sub>. Var. **transversum** SANTSCHI, 1918, *Bull. Soc. Hist. Nat. Afr. Nord*, IX, pp. 124 and 128 (♀).

Type locality: Pretoria, TRANSVAAL (C. U. Brain).

38d. Subsp. **inversum** FOREL, 1916, *Rev. Suisse Zool.*, XXIV, p. 421 (♀). SANTSCHI, 1918, *Bull. Soc. Hist. Nat. Afr. Nord*, IX, pp. 124 and 129 (♀).

*Tetramorium sericeiventris* var. *inversa* SANTSCHI, 1910, *Ann. Soc. Ent. France*, LXXVIII, (1909), p. 384 (♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

FRENCH CONGO: M'Pila (A. Weiss). BELGIAN CONGO: St. Gabriel (Kohl).

38d<sub>1</sub>. Var. **defrictum** SANTSCHI, 1918, *Bull. Soc. Hist. Nat. Afr. Nord*, IX, pp. 124 and 129 (♀).

Type locality: Malindi, RHODESIA (G. Arnold).

NATAL: Durban. BASUTOLAND.

38e. Subsp. **petersi** (FOREL).

*Tetramorium blochmanni* subsp. *petersi* FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 19 (♀). ARNOLD, 1917, *Ann. South African Mus.*, XIV, p. 280 (♀).

Type locality: Okahandja, GERMAN SOUTHWEST AFRICA (Peters).

39. **Tetramorium setigerum** MAYR, 1901, *Ann. Naturh. Hofmus. Wien*, XVI, p. 22 (♀). FOREL, 1910, *Ann. Soc. Ent. Belgique*, LIV, p. 424 (♀, ♀, ♂). ARNOLD, 1917, *Ann. South African Mus.*, XIV, p. 287 (♀, ♀, ♂).

Type locality: Bothaville, ORANGE FREE STATE (H. Brauns).

NATAL: (R. C. Wroughton; Standfuss).

39a. Subsp. **quaerens** FOREL, 1914, *Bull. Soc. Vaudoise Sc. Nat.*, (5) L, p. 226 (♀). ARNOLD, 1917, *Ann. South African Mus.*, XIV, p. 289 (♀). See p. 193.

Type locality: Bulawayo, RHODESIA (G. Arnold).

NATAL: Durban (Marley). BELGIAN CONGO: Niapu (Lang and Chapin).

40. ***Tetramorium setuliferum*** EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 36 (♀). FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 19 (♀, ♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 118 (♀). ARNOLD, 1913, Proc. Rhodesia Sc. Assoc., XII, p. 14; 1917, Ann. South African Mus., XIV, p. 289 (♀, ♀, ♂), Pl. VII, figs. 101, 101a.

*Tetramorium squamiferum* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 80 (♀) (without description); 1907, Mitt. Naturh. Mus. Hamburg, XXIV, p. 15 (♀) (without description).

Type locality: Vrijburg, CAPE PROVINCE (E. Simon).

NORTH WEST RHODESIA: Mwengwa (H. Dollman, in Coll. Wheeler). SOUTHERN RHODESIA: Bulawayo (G. Arnold). BASUTOLAND: (Weitzecker). CAPE PROVINCE: Mafeking. DELAGOA: (Liengme). ORANGE FREE STATE: (Weitzecker); Bothaville (H. Brauns). BECHUANALAND: Khakhea; Severelela; Kooa to Sekgoma (L. Schultze). GERMAN SOUTHWEST AFRICA: Gobabis (Gentz). NATAL: (R. C. Wroughton).

Specimens collected in Natal by Wroughton and received from Forel as "*T. squamiferum* Emery in litt." agree entirely with Emery's description of *T. setuliferum*.

401. Var. ***cucalense*** SANTSCHI, 1910, Ann. Soc. Ent. France, LXXIX, p. 356 (♀).

Type locality: Cucala near Caconda, BENGUELA (J. Cruchet).

402. Var. ***triptoleum*** ARNOLD, 1917, Ann. South African Mus., XIV, p. 292 (♀).

Type locality: not mentioned, probably RHODESIA (G. Arnold).

40a. Subsp. ***cluna*** FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 218 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 292 (♀).

Type locality: Willowmore, CAPE PROVINCE (H. Brauns).

40b. Subsp. ***galoasanum*** SANTSCHI, 1910, Ann. Soc. Ent. France, LXXIX, p. 356.

*Tetramorium setuliferum* var. *galoasana* SANTSCHI, 1910, *ibid.*, LXXVIII, (1909), p. 381 (♀, ♀, ♂).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

FRENCH CONGO: M'Bounion; Mindouga; Comba-Ibre (A. Weiss).

41. ***Tetramorium simillimum*** (F. SMITH) MAYR, 1861, 'Europ. Formicid.,' p. 61 (♀); 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 456; 1870, *ibid.*, XX, p. 972 (♀). ERN. ANDRÉ, 1874, Rev. Mag. Zool., (3) II, p. 191; 1881, Ann. Soc. Ent. France, (6) VII, p. 71 (♀, ♀). FOREL, 1881, Mitth. München. Ent. Ver., V, p. 3. ERN. ANDRÉ, 1883, 'Spec. Hym. Europ. Algérie,' II, pp. 287, 289, 290 (♀, ♀, ♂). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 134. MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicid.,' p. 7. FOREL, 1904, Ann. Soc. Ent. Belgique, XLVIII, p. 422; 1907, Ann. Mus. Nat. Hungarici, V, p. 13 (♀). KARAWAIEW, 1911, Rev. Russe Ent., XI, p. 8 (♀). FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 225. EMERY, 1909, Deutsch. Ent. Zeitschr., p. 696 (♀, ♀, ♂). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 421 (♀, ♀, ♂). ARNOLD, 1917, Ann. South African Mus., XIV, p. 326 (♀, ♀, ♂). WASMANN, 1918, Ent. Mitt. Deutsch. Ent. Mus. Berlin, VII, p. 136. See pp. 193 and 1030.

*Myrmica simillima* F. SMITH, 1851, 'List Brit. Anim. Brit. Mus., VI, Aculeat.,' p. 118 (♀). CURTIS, 1854, Trans. Linn. Soc. London, XXI, p. 216 (♀). F. SMITH, 1855, Trans. Ent. Soc. London, (2) III, p. 129 (♀).

*Tetrogmus caldarius* ROGER, 1857, Berlin. Ent. Zeitschr., I, p. 12 (♀, ♀); 1861, ibid., V, p. 172 (♂); 1862, ibid., VI, p. 297.

*Myrmica (Leptothorax) simillima* F. SMITH, 1858, 'Cat. Brit. Fossor. Hym.', p. 31 (♀).

*Myrmica caldaria* MEINERT, 1860, Danske Vidensk. Selsk. Skrift., naturv. math. Afd., (5) V, p. 334 (♀, ♀, ♂).

*Tetrogmus simillimus* ROGER, 1863, 'Verzeich. Formicid.', p. 27.

*Leptothorax simillimus* WHITE, 1883, 'Ants and Their Ways,' p. 266.

*Tetramorium (Tetrogmus) simillimum* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 106 (♀).

Type locality: Dorsetshire, ENGLAND, in a hothouse (Dale).

Tropicopolitan. CAMEROON: Soppo (v. Rothkirch). BELGIAN CONGO: St. Gabriel (H. Kohl); Stanleyville (Lang and Chapin). GERMAN EAST AFRICA: Kibosho (Katona). BRITISH EAST AFRICA: Shimoni (Alluaud and Jeannel). EGYPT: Ismailia (Biró). ANGLO-EGYPTIAN SUDAN: White Nile, south of Ondurman (I. Trägårdh); Khartum (Karawaiew). NATAL: Durban (G. Arnold).

411. Var. **poweri** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 225 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 328 (♀).

Type locality: Kimberley, CAPE PROVINCE (Power).

412. Var. **shilohense** FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 218 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 329 (♀).

Type locality: Shiloh, SOUTHERN RHODESIA (G. Arnold).

RHODESIA: Bembesi (G. Arnold).

41a. Subsp. **bothæ** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 425 (♀, ♀, ♂). ARNOLD, 1917, Ann. South African Mus., XIV, p. 331 (♀, ♀, ♂).

Type locality: BASUTOLAND (R. C. Wroughton; Haviland).

NATAL: (R. C. Wroughton).

41b. Subsp. **delagoense** FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 80 (♀, ♀, ♂); 1910, Ann. Soc. Ent. Belgique, LIV, p. 425. ARNOLD, 1917, Ann. South African Mus., XIV, p. 330 (♀, ♀, ♂).

Type locality: DELAGOA (Liengme).

NATAL: (R. C. Wroughton).

41c. Subsp. **isipingense** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 225 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 329 (♀).

Type locality: Isipingo, NATAL (Marley).

41c. Var. **dumezi** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 422 (♀). See p. 193.

Type locality: St. Gabriel, BELGIAN CONGO (H. Kohl).

BELGIAN CONGO: Thysville (J. Bequaert).

42. **Tetramorium simoni** EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 36 (♀), Pl. II, fig. 22. ARNOLD, 1917, Ann. South African Mus., XIV, p. 295 (♀).

Type locality: Makapan, TRANSVAAL (E. Simon).

43. **Tetramorium simulator** ARNOLD, 1917, Ann. South African Mus., XIV, p. 297 (♀), Pl. VII, fig. 102.

Type locality: Malindi, SOUTHERN RHODESIA (G. Arnold).

44. **Tetramorium solidum** EMERY, 1886, Bull. Soc. Ent. Italiana, XVIII, p. 362 (♀, ♀), Pl. XVII, fig. 7. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 135. DIXEY

and LONGSTAFF, 1907, Trans. Ent. Soc. London, p. 333. FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 19 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 292 (♀, ♀).

Type locality: Cape of Good Hope (L. Péringuey).

CAPE PROVINCE: Steinkopf (L. Schultze). NATAL: Ladysmith (Dixey and Longstaff).

441. Var. **signatum** EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 35 (♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 118 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 293 (♀), Pl. VII, fig. 98.

Type locality: Matjesfontein, CAPE PROVINCE (E. Simon).

CAPE PROVINCE: Kimberley; Willowmore (H. Brauns).

44a. Subsp. **lugubre** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 425 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 293 (♀).

Type locality: MOSSAMEDES (Picard).

44a<sub>1</sub>. Var. **grootense** (FOREL) ARNOLD, 1917, Ann. South African Mus., XIV, p. 294 (♀, ♂).

*Tetramorium solidum* var. *grootensis* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 118 (♀, ♂?).

Type locality: Willowmore, CAPE PROVINCE (H. Brauns).

45. **Tetramorium squaminode** SANTSCHI, 1910, Ann. Soc. Ent. France, LXXIX, p. 356, fig. 2 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 102 (♀, ♀, ♂).

Type locality: Mt. Kilimanjaro, 3200-3800 m., GERMAN EAST AFRICA (Alluaud and Jeannel).

45a. Subsp. **do** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 224 (♀, ♀, ♂). ARNOLD, 1917, Ann. South African Mus., XIV, p. 314 (♀, ♀, ♂).

Type locality: Bulawayo, RHODESIA (G. Arnold).

45a<sub>1</sub>. Var. **flaviceps** ARNOLD, 1917, Ann. South African Mus., XIV, p. 316 (♀).

Type locality: Matoppos Hills, SOUTHERN RHODESIA (G. Arnold).

45a<sub>2</sub>. Var. **mus** ARNOLD, 1917, Ann. South African Mus., XIV, p. 316 (♀).

Type locality: Hillside, Bulawayo, RHODESIA (G. Arnold).

46. **Tetramorium subcæcum** FOREL, 1907, Rev. d'Ent. Caen, XXVI, p. 137 (♀).

Type locality: Toullo, ABYSSINIA (de Rothschild).

461. Var. **inscium** FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 218 (♀). EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 17 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 318 (♀).

Type locality: Bulawayo, RHODESIA (G. Arnold).

RHODESIA: Matoppos Hills (G. Arnold). ERITREA: Nefasit (F. Silvestri).

47. **Tetramorium termitobium** EMERY, 1908, Ann. Soc. Ent. Belgique, LII, p. 186 (♀).

Type locality: Sankuru, BELGIAN CONGO (Luja).

48. **Tetramorium tersum** SANTSCHI, 1910, Ann. Soc. Ent. France, LXXIX, p. 357, fig. 1 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 102 (♀).

Type locality: Naivasha, Rift Valley, BRITISH EAST AFRICA (C. Alluaud).

49. **Tetramorium titus** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 427 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 317 (♀).

Type locality: Mountains of NATAL (R. C. Wroughton).



50. **Tetramorium trægaordhi** SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 23 (♀, ♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 319 (♀, ♀).

Type locality: Stamford Hill, NATAL (I. Trägårdh).

#### **Decamorium FOREL**

*Tetramorium* subg. *Decamorium* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 121.

Genotype: *Tetramorium (Decamorium) decem* Forel, 1913.

1. **Decamorium decem** (FOREL).

*Tetramorium (Decamorium) decem* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 121 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 349 (♀, ♀, ♂), Pl. VIII, fig. 111.

Type locality: Redbank, RHODESIA (G. Arnold).

SOUTHERN RHODESIA: Nyamandhloru; Hillside, Bulawayo (G. Arnold); Hartley (H. B. Maufe).

1. Var. **ultor** (FOREL).

*Tetramorium (Decamorium) decem* var. *ultor* FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 217 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 351 (♀).

Type locality: Shiloh, SOUTHERN RHODESIA (G. Arnold).

#### **Xiphomyrmex FOREL**

*Tetramorium* subg. *Xiphomyrmex* FOREL, 1887, Mitth. Schweiz. Ent. Ges., VII, p. 385.

Genotype: *Tetramorium (Xiphomyrmex) kelleri* Forel, 1887.

1. **Xiphomyrmex angulinodis** SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 16, fig. 3a (♀). See p. 194.

*Tetramorium (Xiphomyrmex) angulinode* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 385, fig. 12 (♀, ♀, ♂). FOREL, 1911, Rev. Zool. Afr., I, p. 279 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 350 (♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

BELGIAN CONGO: Leopoldville (Dubois); Congo da Lemba (R. Mayné); Medje; Irumu (Lang and Chapin). FRENCH CONGO: Samkita (F. Faure).

1. Var. **chloe** SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 17, fig. 3c (♀). Type locality: Sawmills, SOUTHERN RHODESIA (G. Arnold).

12. Var. **daphnis** SANTSCHI, 1920, Ann. Soc. Ent. Belgique, LX, p. 16, fig. 3b (♀, ♀).

Type locality: Hillside near Bulawayo, RHODESIA (G. Arnold).

2. **Xiphomyrmex edouardi** (FOREL) SANTSCHI, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 344 (♀).

*Tetramorium (Xiphomyrmex) edouardi* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 82 (♀).

Type locality: SOUTHERN ABYSSINIA (Hg).

ABYSSINIA: (Reichensperger).

3. **Xiphomyrmex escherichi** (FOREL) EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 4 (♀).

*Tetramorium (Xiphomyrmex) escherichi* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 259 (♀, ♀).

Type locality: Ghinda, ERITREA (K. Escherich).

ERITREA: Nefasit (F. Silvestri).

4. **Xiphomyrmex fossulatus** (FOREL).

*Tetramorium (Xiphomyrmex) fossulatum* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 428 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 348 (♀), Pl. VII, figs. 107, 109.

Type locality: Willbrook, NATAL (R. C. Wroughton).

5. **Xiphomyrmex humbloti** (FOREL). See p. 1031.

5<sub>1</sub>. Var. **pembensis** (FOREL).

*Tetramorium (Xiphomyrmex) humblotii* var. *pembensis* FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika (1903-05),' II, p. 83 (♀, ♂); 1907, Ann. Mus. Nat. Hungarici, V, p. 13 (♀, ♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 120 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 106 (♀).

Type locality: Fundu Island, W. Pemba, BRITISH EAST AFRICA (Voeltzkow).

GERMAN EAST AFRICA: Moshi; Arusha-chini; Boma Gombe (Katona). BRITISH EAST AFRICA: Mombasa (Alluaud and Jeannel).

5<sub>2</sub>. Var. **victoriensis** (FOREL).

*Tetramorium (Xiphomyrmex) humblotii* var. *victoriensis* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 120 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 346 (♀, ♀, ♂).

Type locality: Victoria Falls, RHODESIA (G. Arnold).

6. **Xiphomyrmex kivuensis** (STITZ).

*Tetramorium (Xiphomyrmex) kivuense* STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentral. Afr. Exp. (1907-08),' III, p. 386, fig. 6 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 106 (♀).

Type locality: Kwidjwi Island in Lake Kivu, BELGIAN CONGO (Schubotz).

BRITISH EAST AFRICA: Naivasha, Rift Valley, 1900 m. (Alluaud and Jeannel).

7. **Xiphomyrmex minusculus** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 369, fig. 32 (♀).

Type locality: Victoria, CAMEROON (F. Silvestri).

8. **Xiphomyrmex murali** (FOREL) SANTSCHI, 1919, Rev. Zool. Afr., VII, p. 88.

*Tetramorium (Xiphomyrmex) murali* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 429 (♀).

Type locality: CAMEROON (L. v. Murali).

BELGIAN CONGO: Penge (J. Bequaert).

8<sub>1</sub>. Var. **trilineatus** SANTSCHI, 1919, Rev. Zool. Afr., VII, p. 88 (♀, ♀).

*Xiphomyrmex murali* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 368 (♀, ♀).

Type locality: Aburi, GOLD COAST (F. Silvestri).

8<sub>2</sub>. Subsp. **flavithorax** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 369, fig. 31 (♀).

Type locality: Aburi, GOLD COAST (F. Silvestri).

9. **Xiphomyrmex occidentalis** SANTSCHI, 1916, Bull. Soc. Ent. France, p. 50, fig. 1 (♀).

Type locality: CAMEROON.

9<sub>a</sub>. Subsp. **akengensis** Wm. M. WHEELER. See p. 194 (♀, ♀).

Type locality: Akenge, BELGIAN CONGO (Lang and Chapin).

LIBERIA.

10. **Xiphomyrmex orbiceps** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 367, fig. 30 (♀).

Type locality: Victoria, CAMEROON (F. Silvestri).

GOLD COAST: Aburi (F. Silvestri).

11. **Xiphomyrmex weitzeckeri** (EMERY).

*Tetramorium* (*Xiphomyrmex*) *weitzeckeri* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 39 (♀). WASMANN, 1911, Tijdschr. v. Ent., LIV, p. 201. REICHENSPERGER, 1915, Med. Göteborgs Mus. Zool. Afd., V, pp. 40 and 73.

*Tetramorium* (*Xiphomyrmex*) *weitzeckeri* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 428 (♀).

*Tetramorium* (*Xiphomyrmex*) *weitzeckeri* FOREL, 1913, Rev. Zool. Afr., II, p. 319 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 345 (♀, ♀).

*Tetramorium weitzeckeri* BEQUAERT, 1913, Rev. Zool. Afr., II, p. 425.

*Tetramorium* (*Xiphomyrmex*) *weitzeckeri* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 24 (♀).

Type locality: Verulam, NATAL (Weitzecker).

BELGIAN CONGO: Elisabethville (J. Bequaert). RHODESIA: Victoria Falls (R. C. Wroughton); Redbank; Bulawayo; Hope Fountain (G. Arnold). NATAL: (Haviland); Durban; Stamford Hill (I. Trägårdh).

#### **Tetramyrma FOREL**

*Dilobocondyla* subg. *Tetramyrma* FOREL, 1912, Rev. Suisse Zool., XX, p. 766.

*Tetramyrma* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 122; 1917, Bull. Soc. Vaudoise Sc. Nat., (5) LI, p. 245. ARNOLD, 1917, Ann. South African Mus., XIV, p. 358.

Genotype: *Dilobocondyla* (*Tetramyrma*) *braunsi* Forel, 1912.

1. **Tetramyrma braunsi** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 122 (♀ ergat., ♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 358 (♀, ♀), Pl. VII, fig. 86.

*Dilobocondyla* (*Tetramyrma*) *braunsi* FOREL, 1912, Rev. Suisse Zool., XX, p. 767 (♀).

Type locality: Willowmore, CAPE PROVINCE (H. Brauns).

#### **Rhoptromyrma MAYR**

*Rhoptromyrma* MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 18.

Genotype: *Rhoptromyrma globulinodis* Mayr, 1901.

1. **Rhoptromyrma arnoldi** SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 503 (♀); 1917, *ibid.*, LXXXV, (1916), p. 286.

Type locality: Victoria Falls, RHODESIA (G. Arnold).

2. **Rhoptromyrma globulinodis** MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 20 (♀, ♀, ♂). ARNOLD, 1917, Ann. South African Mus., XIV, p. 352 (♀, ♀, ♂).

Type locality: Port Elizabeth, CAPE PROVINCE (H. Brauns).

2a. Subsp. **alberti** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 419 (♀).

Type locality: BELGIAN CONGO (Kohl).

3. **Rhoptromyrma opacus** FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 59, footnote (♀). EMERY, *ibid.*, p. 133. FOREL, 1916, Rev. Suisse Zool., XXIV, p. 419 (♀). See p. 195.

Type locality: CAMEROON (Conradt).

BELGIAN CONGO: (Kohl); Thysville (J. Bequaert).

31. Var. **estus** FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 59 (♀, ♀, ♂)  
Type locality: Lower CONGO, in stomach of *Manis temminckii* (Solon).
32. Var. **laeviceps** SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 504 (♀).  
Type locality: Boma, BELGIAN CONGO.
4. **Rhoptromyrmex solleri** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 430 (♀).  
Type locality: Bissao, PORTUGUESE GUINEA (Soller).
5. **Rhoptromyrmex steini** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 122 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 357 (♀).  
Type locality: Ladismith, CAPE PROVINCE (H. Brauns).
6. **Rhoptromyrmex tessmanni** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, 421 (♀).  
Type locality: Alen, SPANISH GUINEA (Tessmann).
7. **Rhoptromyrmex transversinodis** MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 22 (♀). BERGROTH, 1903, Wien. Ent. Zeitg., XXII, p. 254. ARNOLD, 1917, Ann. South African Mus., XIV, p. 355 (♀, ♀), Pl. VIII, figs. 112, 112a, 113, 113a. *Rhoplaomyrmex transversinodis* "MAYR" WASMANN, 1898, Wien. Ent. Zeitg., XVII, p. 99 (without description).  
Type locality: Port Elizabeth, CAPE PROVINCE (H. Brauns).  
ORANGE FREE STATE: Bothaville (H. Brauns). TRANSVAAL: Pretoria (C. U. Brain).

### **Triglyphothrix FOREL**

- Triglyphothrix* FOREL, 1890, Ann. Soc. Ent. Belgique, XXXIV, C. R., p. cvi.  
Genotype: *Triglyphothrix walshi* Forel, 1890.
1. **Triglyphothrix areolatus** STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 142, fig. 9 (♀).  
Type locality: Bibundi, CAMEROON (Tessmann).
  2. **Triglyphothrix auropunctatus** FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 20 (♀, ♀).  
*Tetramorium (Triglyphothrix) auropunctatus* ARNOLD, 1917, Ann. South African Mus., XIV, p. 334 (♀, ♀).  
Type locality: NATAL, 2500 m. (Haviland).
  21. Var. **bulawayensis** (ARNOLD).  
*Tetramorium (Triglyphothrix) auropunctatus* var. *bulawayensis* ARNOLD, 1917, Ann. South African Mus., XIV, p. 335 (♀).  
Type locality: Bulawayo, SOUTHERN RHODESIA (G. Arnold).
  22. Var. **fusciventris** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 116 (♀).  
*Tetramorium (Triglyphothrix) auropunctatus* var. *fusciventris* ARNOLD, 1917, Ann. South African Mus., XIV, p. 336 (♀).  
Type locality: Bulawayo, SOUTHERN RHODESIA (G. Arnold).
  23. Var. **pallens** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 424 (♀); 1911, Deutsch. Ent. Zeitschr., p. 311 (♀).  
*Tetramorium (Triglyphothrix) auropunctatus* var. *pallens* ARNOLD, 1917, Ann. South African Mus., XIV, p. 336 (♀).  
Type locality: NATAL (Haviland).
  24. Var. **rhodesianus** FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 221 (♀).

*Tetramorium (Triglyphothrix) auropunctatus* var. *rhodesiana* ARNOLD, 1917, Ann. South African Mus., XIV, p. 336 (♀).

Type locality: Bembesi, SOUTHERN RHODESIA (G. Arnold).

3. **Triglyphothrix constanciae** (ARNOLD).

*Tetramorium (Triglyphothrix) constanciae* ARNOLD, 1917, Ann. South African Mus., XIV, p. 339 (♀), Pl. VII, figs. 94, 94a.

Type locality: Matoppo Hills, SOUTHERN RHODESIA (G. Arnold).

4. **Triglyphothrix desertorum** FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 20 (♀, ♂).

*Tetramorium (Triglyphothrix) desertorum* ARNOLD, 1917, Ann. South African Mus., XIV, p. 344 (♀, ♂).

Type locality: Kgokong to Kang, BECHUANALAND (L. Schultze).

5. **Triglyphothrix emini** FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 79 (♀).

Type locality: SOUTHERN ABYSSINIA (Ilg).

6. **Triglyphothrix gabonensis** ERN. ANDRÉ, 1892, Rev. d'Ent. Caen, XI, p. 53 (♀, ♀, ♂). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 135. STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 144 (♀). FOREL, 1913, Rev. Suisse Zool., XXI, p. 668 (♀). STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 393 (♀, ♂). See p. 197.

Type locality: Gaboon, FRENCH CONGO.

CAMEROON: Mundame (Conradt). BELGIAN CONGO: Angu; Libenge; Mon-gumba, on the Ubangi River (Schubotz); Akengé; Niapu; Ngayu; Medje (Lang and Chapin).

6i. Var. **boulognei** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 423 (♀).

Type locality: BELGIAN CONGO (H. Kohl).

6a. Var. **brevispinosus** STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 144 (♀).

Type locality: Bismarckburg, Togo (Conradt).

6a. Subsp. **soyauxi** FOREL, 1901, Mitt. Naturh. Mus. Hamburg, XVIII, p. 53 (♀).

Type locality: Sibange, FRENCH CONGO (Soyaux).

7. **Triglyphothrix hepburni** (ARNOLD).

*Tetramorium (Triglyphothrix) hepburni* ARNOLD, 1917, Ann. South African Mus., XIV, p. 340 (♀, ♀, ♂).

Type locality: Hillside, Bulawayo, SOUTHERN RHODESIA (G. Arnold).

SOUTHERN RHODESIA: Matoppo Hills (G. Arnold).

8. **Triglyphothrix imbellis** EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 18, fig. 9 (♀).

Type locality: Nefasit, ERITREA (F. Silvestri).

9. **Triglyphothrix inezulæ** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 221 (♀, ♂).

*Tetramorium (Triglyphothrix) inezulæ* ARNOLD, 1917, Ann. South African Mus., XIV, p. 343 (♀, ♂).

Type locality: Beach Bush, Durban, NATAL (G. Arnold).

10. **Triglyphothrix marleyi** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 221 (♀).

*Tetramorium (Triglyphothrix) marleyi* ARNOLD, 1917, Ann. South African Mus., XIV, p. 342 (♀).

Type locality: Krantzklouf, NATAL (Marley).

NATAL: Durban (Marley).

11. **Triglyphothrix marthæ** FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 265 (♀).

Type locality: ZANZIBAR.

12. **Triglyphothrix microps** MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 25 (♀, ♀).

*Tetramorium (Triglyphothrix) microps* ARNOLD, 1917, Ann. South African Mus., XIV, p. 337 (♀, ♀).

Type locality: Port Elizabeth, CAPE PROVINCE (H. Brauns).

13. **Triglyphothrix mucidus** FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 71 (♀). See p. 197.

Type locality: Sankuru, BELGIAN CONGO (Luja).

BELGIAN CONGO: Medje; Ngayu; Boyulu (Lang and Chapin).

14. **Triglyphothrix pauper** SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), p. 286 (♀).

Type locality: Ungusa River, Cawston Farm, SOUTHERN RHODESIA (G. Arnold).

15. **Triglyphothrix rothschildi** FOREL, 1907, Rev. d'Ent. Caen, XXVI, p. 134 (♀).

Type locality: Harar, ABYSSINIA (de Rothschild).

16. **Triglyphothrix silvestrii** EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 17, fig. 8 (♀).

Type locality: Nefasit, ERITREA (F. Silvestri).

17. **Triglyphothrix striatidens** (EMERY) DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 136. FOREL, 1900, Mitth. Schweiz. Ent. Ges., X, p. 284 (♀); 1901, Mitt. Zool. Mus. Berlin, II, p. 10; 1903, Journ. Bombay Nat. Hist. Soc., XIV, p. 704. BINGHAM, 1903, 'Fauna Brit. India, Hym.,' II, p. 173; 1906, Bull. Misc. Inform. Bot. Gard. Kew, Add. Ser. V, p. 28. DONISTHORPE, 1908, *ibid.*, p. 122. WM. M. WHEELER, 1909, Bull. American Mus. Nat. Hist., XXVI, p. 336. DONISTHORPE, 1915, 'British Ants,' p. 341. FOREL, 1911, '1<sup>er</sup> Congr. Intern. Entom. Bruxelles (1910),' II, Mém., p. 83; 1912, Mém. Soc. Ent. Belgique, XX, p. 1; 1913, Zool. Jahrb. Abt. Syst., XXXVI, p. 82. WM. M. WHEELER, 1916, Journ. Econ. Ent., IX, pp. 566-569, fig. 39 (♀). See p. 1032.

*Tetramorium obesum* subsp. *striatidens* EMERY, 1889, Ann. Mus. Civ. Genova, XXVII, p. 501 (♀).

- Triglyphothrix obesum* subsp. *striatidens* EMERY, 1891, 'Explor. Tunisie, Fourmis,' p. 4.

Type locality: Bhamo, BURMA (L. Fea).

This Indian ant is becoming tropicopolitan. TUNIS. SIERRA LEONE.

18. **Triglyphothrix trimeni** EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 40 (♀, ♀). FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 13 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 107 (♀).

*Tetramorium (Triglyphothrix) trimeni* ARNOLD, 1917, Ann. South African Mus., XIV, p. 337 (♀, ♀).

Type locality: Kimberley, CAPE PROVINCE (E. Simon).

GERMAN EAST AFRICA: Kibosho; Mto-ya-Kifaru (Katona); New Moschi; Mt. Kilimanjaro, 800 m. (Alluaud and Jeannel). TRANSVAAL: Hamman's Kraal (E. Simon).

## Ochetomyrmicini Emery

## Wasmannia FOREL

*Wasmannia* FOREL, 1893, Trans. Ent. Soc. London, p. 383.

Type: *Tetramorium* (?) *auropunctatum* ROGER, 1863.

1. ***Wasmannia auropunctata*** (ROGER) FOREL, 1893, Trans. Ent. Soc. London, p. 383 (♀, ♀, ♂).

*Tetramorium* (?) *auropunctatum* ROGER, 1863, Berlin. Ent. Zeitschr., VII, p. 182 (♀).

*Xiphomyrmex atomum* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 370 (♀).

*Wasmannia auropunctata* var. *atoma* SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 504 (♀).

Type locality: CUBA (Gundlach).

Neotropical. FRENCH CONGO: Libreville (F. Silvestri); evidently introduced from South America.

## Cataulacini Emery

## Cataulacus F. SMITH

*Cataulacus* F. SMITH, 1854, Trans. Ent. Soc. London, (2) II, p. 225.

*Cryptocerus* (part) LEPELETIER. *Formica* (part) LATREILLE.

Genotype: *Cataulacus taprobanæ* F. Smith, 1854.

1. ***Cataulacus baumi*** FOREL, 1901, Mitth. Schweiz. Ent. Ges., X, p. 304 (♀, ♀, ♂); in Baum, 1903, 'Kunene-Sambesi Expedition,' p. 560 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 388 (♀, ♀, ♂).

Type locality: between the Cubango and Cuito Rivers, MOSSAMEDES (Baum and Van der Kellen).

1a. Subsp. ***batonga*** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 114 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 404 (♀).

*Cataulacus baumi* var. *batonga* ARNOLD, 1917, *ibid.*, XIV, p. 389 (♀), Pl. VIII, figs. 119 and 119a.

Type locality: RHODESIA (G. Arnold).

1a<sub>1</sub>. Var. ***bulawayensis*** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 218 (♀, ♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 404 (♀).

*Cataulacus baumi* var. *bulawayensis* ARNOLD, 1917, *ibid.*, XIV, p. 391 (♀, ♀).

Type locality: Bulawayo, SOUTHERN RHODESIA (G. Arnold).

2. ***Cataulacus bequaerti*** FOREL, 1913, Rev. Zool. Afr., II, p. 316 (♀). BEQUAERT, *ibid.*, p. 424.

Type locality: Village Kabanza on the River Lovoi near Kikondja, BELGIAN CONGO (J. Bequaert).

3. ***Cataulacus coriaceus*** STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 138, fig. 7 (♀).

Type locality: Mundame, CAMEROON (Conradt).

4. ***Cataulacus egenus*** SANTSCHI, 1910, Ann. Soc. Ent. France, LXXIX, p. 359, fig. (♀). See p. 199 (♀, ♀).

Type locality: Madingu, FRENCH CONGO (P. Zimmermann).

BELGIAN CONGO: Medje (Lang and Chapin).

4a. Subsp. **simplex** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 111, fig. 18 (♀).

Type locality: CENTRAL UGANDA (C. Alluaud).

5. **Cataulacus erinaceus** STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 134, fig. 3 (♀). FOREL, 1913, Rev. Zool. Afr., II, p. 315 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 350 (♀); 1913, Rev. Suisse Zool., XXI, p. 668 (♀); 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 345 (♀); 1916, Rev. Suisse Zool., XXIV, p. 427 (♀, ♀). See p. 198.

*Cataulacus princeps* "EMERY" FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 71 (♀), without description.

Type locality: Alen, SPANISH GUINEA (Tessmann).

CAMEROON: Mundame (Conradt). BELGIAN CONGO: Kondué, Kasai; San-kuru (Luja); Batiamponde (H. Kohl); Stanleyville; Risimu (Lang and Chapin).

51. Var. **crassispina** SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), p. 287 (♀).

Type locality: Goda, FRENCH CONGO (P. Chaleuf).

6. **Cataulacus foveolatus** STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 140 (♀).

Type locality: Uelleberg, SPANISH GUINEA (Tessmann).

7. **Cataulacus guineensis** F. SMITH, 1854, Trans. Ent. Soc. London, (2) II, p. 225 (♀), Pl. xx, fig. 5; 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 196; 1862, Trans. Ent. Soc. London, (3) I, p. 414 (♀). MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 403. ROGER, 1863, 'Verzeich. Formicid.,' p. 39. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 138. ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 4 (♀). MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 129. SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 390 (♀, ♀). FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 263 (♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 373 (♀, ♀). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 427 (♀, ♀). See p. 199.

Type locality: Tropical West Africa.

LIBERIA: Junk River (H. Brauns). DAHOMEY: Kotonou (F. Silvestri). SOUTHERN NIGERIA: Lagos (F. Silvestri); Old Calabar (Bates). FRENCH CONGO: Ogowe (Moequers); Brazzaville (A. Weiss). BELGIAN CONGO: Malomé on the Okiaivo (Kohl); Leopoldville to Yumbi; Bolobo; Lukolela to Basoko; Isangi; Stanleyville; Medje; Akenge (Lang and Chapin).

71. Var. **alenensis** (STITZ) FOREL, 1913, Rev. Suisse Zool., XXI, p. 668 (♀).

*Cataulacus sulcatus* var. *alenensis* STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 137 (♀).

Type locality: Alen, SPANISH GUINEA (Tessmann).

CAMEROON: (Conradt).

72. Var. **fernandensis** (STITZ).

*Cataulacus sulcatus* var. *fernandensis* STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 137 (♀).

Type locality: FERNANDO Po (Zenker).

73. Var. **sulcatus** (STITZ) FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 263 (♀).

*Cataulacus sulcatus* STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 136, figs. 4-6 (♀, ♀, ♂).

*Cataulacus guineensis* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 421.

Type locality: Yaunde, CAMEROON (Zenker).

SOUTHERN NIGERIA: Old Calabar (Bates).

7a. Subsp. **sulcinodis** EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), p. 563 (♀), Pl. xv, fig. 8.



*Cataulacus sulcinodis* DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 139.

Type locality: Assinie, IVORY COAST (C. Alluaud).

8. *Cataulacus hararicus* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 79 (♀). EMERY, 1895, Ann. Mus. Civ. Genova, XXXV, p. 180 (♀).

Type locality: Harar, SOUTHERN ABYSSINIA (Ilg).

SOMALILAND: Lower Ganale (V. Bottego).

9. *Cataulacus huberi* ERN. ANDRÉ, 1890, Rev. d'Ent. Caen, IX, p. 326 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 138. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 128 (♀). ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 4 (♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXXVIII, (1909), p. 390 (♀).

Type locality: SIERRA LEONE (Mocquerys).

FRENCH CONGO: Ubangi (Dybowski); Ogowe (Mocquerys).

91. Var. *longispinus* STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 139, fig. 8 (♀).

Type locality: Mundame, CAMEROON (Conradt).

9a. Subsp. *herteri* FOREL, 1913, Rev. Zool. Afr., II, p. 315 (♀). BEQUAERT, *ibid.*, p. 423.

Type locality: Welgelegen, BELGIAN CONGO (J. Bequaert).

10. *Cataulacus intrudens* (F. SMITH) MAYR, 1886, Verh. Zool. Bot. Ges. Wien, XXXVI, p. 364. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 138. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 78. EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 41 (♀, ♀). MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 129 (♀); in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 14. SJÖSTEDT, 1908, *ibid.*, p. 117. ARNOLD, 1917, Ann. South African Mus., XIV, p. 391 (♀, ♀, ♂). *Meranophus intrudens* F. SMITH, 1876, Trans. Ent. Soc. London, p. 609 (♀, ♀, ♂), Pl. XI, figs. 7 and 7a. EMERY, 1892, Zool. Anzeiger, XV, p. 237.

Type locality: Weenen District, NATAL, in thorns of *Acacia* (J. M. Hutchinson).

DELAGOA: (Liengme). TRANSVAAL: Hamman's Kraal (E. Simon). GERMAN EAST AFRICA: Mombo, Usambara (Sjöstedt).

10a. Subsp. *intermedius* SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), p. 287 (♀).

*Cataulacus intrudens* var. *intermedius* ARNOLD, 1920, Ann. South African Mus., XIV, pp. 403 and 404 (♀).

Type locality: Bembesi, RHODESIA (G. Arnold).

10b. Subsp. *tristiculus* SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 237 (♀).

Type locality: Port Elizabeth, CAPE PROVINCE (T. Reeve).

11. *Cataulacus kohli* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 127, fig. 2 (♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 389, fig. 14 (♀, ♂).

Type locality: Samlia Falls, N'Gamie River, SIERRA LEONE.

FRENCH CONGO: Brazzaville (A. Weiss).

11a. Subsp. *brazzavillensis* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 389, fig. 15 (♀, ♂).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

12. *Cataulacus lobatus* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 126, fig. 1 (♀).

Type locality: Warship harbor in CAMEROON (H. Brauns).

13. *Cataulacus marleyi* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 219 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 398 (♀, ♀); 1920, *ibid.*, XIV, p. 404 (♀).

Type locality: Krantz Kloof, NATAL (Marley).

NATAL: Durban (Marley).

14. **Cataulacus micans** (MAYR) FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 219. ARNOLD, 1917, Ann. South African Mus., XIV, p. 393 (♀, ♀, ♂).

*Cataulacus rugosus* subsp. *micans* MAYR, 1901, Ann. Naturh. Hofmus. Wien, X, p. 27 (♀, ♀, ♂).

Type locality: Port Elizabeth, CAPE PROVINCE (H. Brauns).

- 14a. Subsp. **durbanensis** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 219 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 394 (♀, ♀, ♂); 1920, *ibid.*, XIV, p. 404 (♀).

Type locality: Durban, NATAL (G. Arnold).

15. **Cataulacus mocquerysi** ERN. ANDRÉ, 1889, Rev. d'Ent. Caen, VIII, p. 229 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 138.

Type locality: SIERRA LEONE (Mocquerys).

- 15i. Var. **nainei** FOREL, 1918, Bull. Soc. Vaudoise Sc. Nat., (5) LI, (1917), p. 724 (♀).

Type locality: BELGIAN CONGO (Kohl).

16. **Cataulacus otii** (FOREL).

*Cataulacus wissmanni* subsp. *otii* FOREL, 1901, Mitth. Schweiz. Ent. Ges., X, p. 304 (♀).

Type locality: Durban, NATAL (Haviland).

- 16a. Subsp. **fricatidorsus** SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 26 (♀). TRÄGÅRDH, *ibid.*, p. 45. ARNOLD, 1917, Ann. South African Mus., XIV, p. 401 (♀).

Type locality: Dukudu, ZULULAND (I. Trägårdh).

17. **Cataulacus parallelus** F. SMITH, 1854, Trans. Ent. Soc. London, (2) II, p. 226 (♀), Pl. XIX, fig. 6; 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 196; 1862, Trans. Ent. Soc. London, (3) I, p. 414 (♀). MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 403. ROGER, 1863, 'Verzeich. Formicid.,' p. 39. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 138. ARNOLD, 1917, Ann. South African Mus., XIV, p. 402 (♀).

Type locality: Cape of Good Hope.

18. **Cataulacus pilosus** SANTSCHI, 1920, Rev. Zool. Afr., VIII, p. 118 (♀, ♀).

Type locality: Avakubi, BELGIAN CONGO (J. Bequaert).

19. **Cataulacus pullus** SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 387, fig. 13 (♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

- 19i. Var. **orientalis** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 108 (♀).

Type locality: Voi, 600 m., BRITISH EAST AFRICA (Alluaud and Jeannel).

20. **Cataulacus pygmæus** ERN. ANDRÉ, 1890, Rev. d'Ent. Caen, IX, p. 325 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 139. SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 390 (♀).

Type locality: SIERRA LEONE (Mocquerys).

FRENCH CONGO: Brazzaville (A. Weiss).

- 20i. Var. **bakusuensis** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 350 (♀, ♂).

Type locality: Bakusu, BELGIAN CONGO.

- 20<sub>2</sub>. Var. **chariensis** SANTSCHI, 1910, Ann. Soc. Ent. France, LXXIX, p. 358 (♀).

Type locality: Fort Archambault, MOYEN CHARI (Decorse).

20a. Subsp. **brevisetosus** (FOREL) SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, p. 508.

*Cataulacus brevisetosus* FOREL, 1901, Mitth. Schweiz. Ent. Ges., X, p. 305 (♀); in Baum, 1903, 'Kunene-Sambesi Expedition,' p. 560 (♀).

Type locality: between the Cubango and Cuito Rivers, MOSSAMEDES (Baum and Van der Kellen).

20b. Subsp. **degener** SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 507 (♀).

Type locality: not given.

20c. Subsp. **difficilis** SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 506 (♀).

Type locality: DAHOMEY (Desanti).

20d. Subsp. **jeanneli** SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), pp. 506, footnote, and 508.

*Cataulacus jeanneli* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 108, fig. 16 (♀).

Type locality: Gazi near Mombasa, BRITISH EAST AFRICA (Alluaud and Jeannel).

20e. Subsp. **lujæ** (FOREL) SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), pp. 506, footnote, and 508. See p. 199.

*Cataulacus lujæ* FOREL, 1911, Deutsch. Ent. Zeitschr., p. 311 (♀); 1913, Rev. Zool. Afr., II, p. 316 (♀).

*Cataulacus brevisetosus* subsp. *lujæ* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 220 (♀, ♂); 1916, Rev. Suisse Zool., XXIV, p. 427 (♀, ♂). ARNOLD, 1917, Ann. South African Mus., XIV, p. 397 (♀, ♂); 1917, *ibid.*, XIV, p. 404 (♀).

Type locality: Kondué, BELGIAN CONGO (Luja).

BELGIAN CONGO: St. Gabriel (Kohl); Garamba (Lang and Chapin). SOUTHERN RHODESIA: Bulawayo (G. Arnold). CAPE PROVINCE: Kimberley (Power).

20e<sub>1</sub>. Var. **gilviventris** (FOREL).

*Cataulacus lujæ* var. *gilviventris* FOREL, 1913, Rev. Zool. Afr., II, p. 316 (♀). BEQUAERT, *ibid.*, p. 423.

Type locality: Village Kabanza on the Lovoi River near Kikondja, BELGIAN CONGO (J. Bequaert).

20e<sub>2</sub>. Var. **plebejus** SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 508 (♀).

Type locality: Bulawayo, SOUTHERN RHODESIA (G. Arnold).

20e<sub>3</sub>. Var. **weissi** SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 508.

*Cataulacus weissi* SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 310 (♀). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 427 (♀, ♂).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

BELGIAN CONGO: St. Gabriel (Kohl).

21. **Cataulacus rugosus** (FOREL) MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 129 (♀, ♂). H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 43. ARNOLD, 1917, Ann. South African Mus., XIV, p. 392 (♀, ♂).

*Cataulacus intrudens* var. *rugosus* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 78 (♀).

Type locality: Delagoa Bay, PORTUGUESE EAST AFRICA (A. Müller; Liengme).

GERMAN EAST AFRICA: Tanga (H. Brauns). ZANZIBAR: (H. Brauns).

21. Var. **subrugosus** SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 26 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 393 (♀).

Type locality: Junction of the Umfolosi Rivers, ZULULAND (I. Trägårdh).

22. **Cataulacus schoutedeni** SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 248 (♀, ♀).

Type locality: Congo da Lemba, BELGIAN CONGO (R. Mayné).

23. **Cataulacus tardus** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 372, fig. 33 (♀).

Type locality: Mamou, FRENCH GUINEA (F. Silvestri).

24. **Cataulacus trægaordhi** SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 24, fig. 3 (♀, ♀, ♂). ARNOLD, 1917, Ann. South African Mus., XIV, p. 399 (♀, ♀, ♂).

Type locality: Dukudu, ZULULAND (I. Trägårdh).

ZULULAND: Umfolosi (I. Trägårdh).

24. Var. **plectroniæ** Wm. M. WHEELER. See p. 199 (♀).

Type locality: Stanleyville, BELGIAN CONGO (Lang, Chapin and Bequaert).

24. Var. **ugandensis** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 110 (♀).

Type locality: Unyoro Province, near Hoima, CENTRAL UGANDA (C. Alluaud).

25. **Cataulacus wissmanni** FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 78 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 401 (♀).

Type locality: MOZAMBIQUE (A. Müller).

- 25a. Subsp. **linearis** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 109, fig. 17 (♀).

Type locality: Voi, Wa-Taita, BRITISH EAST AFRICA (Alluaud and Jeannel).

BRITISH EAST AFRICA: Mbuyuni, Pori (Alluaud and Jeannel).

### **Dacetonini** Emery

#### **Microdaceton** SANTSCHI

*Microdaceton* SANTSCHI, 1913, Bull. Soc. Ent. France, p. 478; 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 33.

Genotype: *Microdaceton exornatum* Santschi, 1913.

1. **Microdaceton exornatum** SANTSCHI, 1913, Bull. Soc. Ent. France, p. 478 (♀); 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 33, fig. 8 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 384 (♀).

Type locality: Dukudu, ZULULAND (I. Trägårdh).

#### **Strumigenys** F. SMITH

*Strumigenys* F. SMITH, 1860, Journ. of Entom., I, p. 72.

*Labidogenys* ROGER, 1862, Berlin. Ent. Zeitschr., VI, p. 249.

*Pyramica* ROGER, *ibid.*, p. 251.

Genotype: *Strumigenys mandibularis* F. Smith, 1860.

#### Subgenus 1. **Strumigenys** F. SMITH, *sensu stricto*

Subgenotype: same as genotype.

1. **Strumigenys arnoldi** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 114 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 376 (♀), Pl. VIII, figs. 117, 117a-d. WASMANN, 1918, Ent. Mitt. Deutsch. Ent. Mus. Berlin, VII, p. 143.

Type locality: Bulawayo, SOUTHERN RHODESIA (G. Arnold).

2. **Strumigenys havilandi** FOREL, 1905, Mitt. Naturh. Mus. Hamburg, XXII, p. 13, footnote (♀). SANTSCHI, 1913, Bull. Soc. Ent. France, p. 257 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 377 (♀). WASMANN, 1918, Ent. Mitt. Deutsch. Ent. Mus. Berlin, VII, p. 143.

Type locality: NATAL, 5300 ft. (Haviland).

2a. Subsp. **marleyi** ARNOLD, 1914, Proc. Rhodesia Sc. Assoc., XIII, p. 31 (♀), Pl., fig. 10; 1917, Ann. South African Mus., XIV, p. 378 (♀).

Type locality: Durban, NATAL (Marley).

3. **Strumigenys irrorata** SANTSCHI, 1913, Bull. Soc. Ent. France, p. 257 (♀); 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 29, fig. 5 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 375 (♀).

Type locality: Lake Sibayi, ZULULAND (I. Trägårdh).

4. **Strumigenys reticulata** STITZ, 1910, Mitt. Mus. Berlin, V, p. 141 (♀, ♀). SANTSCHI, 1913, Bull. Soc. Ent. France, p. 257 (♀).

Type locality: Bibundi, CAMEROON (Tessmann).

5. **Strumigenys rufobrunnea** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 373 (♀, ♀).

Type locality: Konakry, FRENCH GUINEA (F. Silvestri).

NIGERIA: Olokemeji (F. Silvestri).

6. **Strumigenys stygia** SANTSCHI, 1913, Bull. Soc. Ent. France, p. 257 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 113, fig. 20 (♀). ALLUAUD and JEANNEL, 1914, Arch. Zool. Gén. Exp., LIII, p. 366.

Type locality: Cave A at Shimoni, BRITISH EAST AFRICA (Alluaud and Jeannel).

7. **Strumigenys sulfurea** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 261 (♀).

Type locality: Samkita, FRENCH CONGO (F. Faure).

8. **Strumigenys tragaordhi** SANTSCHI, 1913, Bull. Soc. Ent. France, p. 257 (♀).

*Strumigenys tragaordhi* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 28, fig. 4 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 374 (♀). EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 19 (♀, ♀).

Type locality: Pietermaritzburg, NATAL (I. Trägårdh).

ERITREA: Ghinda (F. Silvestri). NATAL: Sweetwaters (I. Trägårdh).

## Subgenus 2. **Cephaloxys** F. SMITH

*Cephaloxys* F. SMITH, 1865, Journ. Proc. Linn. Soc. London, Zool., VIII, p. 76.

*Trichoscapa* EMERY, 1869, Ann. Accad. Natural. Napoli, (2) II, p. 24.

*Strumigenys* subg. *Cephaloxys* EMERY, 1916, Bull. Soc. Ent. Italiana, XLVII, p. 204.

Subgenotype: *Cephaloxys capitata* F. Smith, 1865.

9. **Strumigenys (Cephaloxys) alluaudi** SANTSCHI.

*Strumigenys alluaudi* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXIX, p. 360 (♀, ♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 111 (♀, ♀). ALLUAUD and JEANNEL, 1914, Arch. Zool. Gén. Exp., LIII, pp. 368 and 375.

*Strumigenys (Trichoscapa) alluaudi* SANTSCHI, 1913, Bull. Soc. Ent. France, p. 258 (♀).

Type locality: Grotto of Tanga, "Kulumuzi," GERMAN EAST AFRICA (C. Alluaud).

9a. Subsp. **nigeriensis** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 376 (♀).

Type locality: Olokemeji, NIGERIA (F. Silvestri).

10. **Strumigenys (Cephaloxys) biconvexa** SANTSCHI.

*Strumigenys (Trichoscapa) biconvexa* SANTSCHI, 1913, Bull. Soc. Ent. France, p. 258 (♀).

*Strumigenys biconvexa* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 111, fig. 19a (♀, ♀).

Type locality: Likoni, BRITISH EAST AFRICA (Alluaud and Jeannel).

11. **Strumigenys (Cephaloxys) concolor** SANTSCHI.

*Strumigenys (Trichoscapa) concolor* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 375 (♀, ♀).

Type locality: Aburi, GOLD COAST (F. Silvestri).

12. **Strumigenys (Cephaloxys) emarginata** MAYR.

*Strumigenys emarginata* MAYR, 1901, Ann. Naturh. Hofmus. Wien, X, p. 26 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 379 (♀).

*Strumigenys (Trichoscapa) emarginata* SANTSCHI, 1913, Bull. Soc. Ent. France, p. 257 (♀).

Type locality: Port Elizabeth, CAPE PROVINCE (H. Brauns).

13. **Strumigenys (Cephaloxys) escherichi** FOREL.

*Strumigenys escherichi* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 261 (♀).

*Strumigenys (Trichoscapa) escherichi* SANTSCHI, 1913, Bull. Soc. Ent. France, p. 258 (♀).

Type locality: Ghinda, ERITREA (K. Escherich).

13<sub>1</sub>. Var. **cliens** FOREL, 1913, Rev. Zool. Afr., II, p. 317 (♀).

*Strumigenys escherichi* subsp. *cognata* var. *cliens* BEQUAERT, 1913, Rev. Zool. Afr., II, p. 424.

Type locality: Elisabethville, BELGIAN CONGO (J. Bequaert).

13a. Subsp. **boerorum** SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 32 (♀). ARNOLD, 1917, Ann. South African Mus., XIV, p. 383 (♀, ♀).

*Strumigenys (Trichoscapa) cognata* subsp. *boerorum* SANTSCHI, 1913, Bull. Soc. Ent. France, p. 259 (♀).

Type locality: Stamford Hill, NATAL (I. Trägårdh).

ZULULAND: Dukudu (I. Trägårdh).

13b. Subsp. **cognata** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 376 (♀). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 427 (♀, ♀, ♂). WASMANN, 1918, Ent. Mitt. Deutsch. Ent. Mus. Berlin, VII, p. 144.

*Strumigenys cognata* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXIX, p. 362 (♀, ♀); 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 32, fig. 7 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 112, fig. 19b (♀).

*Strumigenys (Trichoscapa) cognata* SANTSCHI, 1913, Bull. Soc. Ent. France, p. 258 (♀).

Type locality: Cucala, BENGUELA (J. Cruchet).

FRENCH GUINEA: Kindia (F. Silvestri). BELGIAN CONGO: (Kohl).

13b<sub>1</sub>. Var. **fusciventris** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 261.

*Strumigenys (Trichoscapa) escherichi* subsp. *cognata* var. *obscuriventris* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 376 (♀).

Type locality: Olokemeji, NIGERIA (F. Silvestri).

- 13c. Subsp. **limbata** FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 222 (♀).  
 ARNOLD, 1917, Ann. South African Mus., XIV, p. 381 (♀, ♀), Pl. VIII, fig. 118.  
 Type locality: Bulawayo, SOUTHERN RHODESIA (G. Arnold).  
 NATAL: Durban (Marley).
14. **Strumigenys (Cephaloxys) glanduscula** SANTSCHI, 1919, Rev. Zool. Afr., VII, p. 88 (♀).  
 Type locality: Yambuya, BELGIAN CONGO (J. Bequaert).
15. **Strumigenys (Cephaloxys) lujæ** FOREL.  
*Strumigenys lujæ* FOREL, 1902, Allgem. Zeitschr. Ent., VII, p. 294, footnote (♀), Pl. I, fig. 1. WASMANN, 1918, Ent. Mitt. Deutsch. Ent. Mus. Berlin, VII, p. 144.  
*Strumigenys (Trichoscapa) lujæ* SANTSCHI, 1913, Bull. Soc. Ent. France, p. 258 (♀).  
 Type locality: Morumballe, on the Zambesi (E. Luja).
16. **Strumigenys (Cephaloxys) maynei** FOREL.  
*Strumigenys (Trichoscapa) maynei* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 427 (♀, ♀, ♂). WASMANN, 1918, Ent. Mitt. Deutsch. Ent. Mus. Berlin, VII, p. 143.  
 Type locality: Stanleyville, BELGIAN CONGO (Kohl).
- 16a. Var. **latiuscula** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 428 (♀, ♀).  
 Type locality: BELGIAN CONGO (R. Mayné).
17. **Strumigenys (Cephaloxys) rothkirchi** WASMANN.  
*Strumigenys rothkirchi* WASMANN, 1918, Ent. Mitt. Deutsch. Ent. Mus. Berlin, VII, p. 142 (♀), Pl. II, figs. 9 and 10.  
 Type locality: Soppo, CAMEROON (v. Rothkirch).
18. **Strumigenys (Cephaloxys) serrula** SANTSCHI.  
*Strumigenys lujæ* var. *serrula* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXXVIII, (1909), p. 390 (♀).  
*Strumigenys serrula* SANTSCHI, 1910, ibid., LXXIX, p. 361 (♀).  
*Strumigenys (Trichoscapa) serrula* SANTSCHI, 1913, Bull. Soc. Ent. France, p. 258 (♀).  
 Type locality: Brazzaville, FRENCH CONGO (A. Weiss).
19. **Strumigenys (Cephaloxys) simoni** EMERY.  
*Strumigenys simoni* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 42 (♀), Pl. II, fig. 21. ARNOLD, 1917, Ann. South African Mus., XIV, p. 380 (♀).  
*Strumigenys (Trichoscapa) simoni* SANTSCHI, 1913, Bull. Soc. Ent. France, p. 258 (♀).  
 Type locality: Makapan, TRANSVAAL (E. Simon).
20. **Strumigenys (Cephaloxys) transversa** SANTSCHI.  
*Strumigenys (Trichoscapa) transversa* SANTSCHI, 1913, Bull. Soc. Ent. France, p. 258 (♀); 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 31, fig. 6 (♀).  
*Strumigenys transversa* ARNOLD, 1917, Ann. South African Mus., XIV, p. 380 (♀).  
 Type locality: Pietermaritzburg, NATAL (I. Trägårdh).

### **Epitritus EMERY**

*Epitritus* EMERY, 1869, Bull. Soc. Ent. Italiana, I, p. 136.

Genotype: *Epitritus argiolus* Emery, 1869.

1. **Epitritus mandibularis** SZABÓ, 1909, Archivum Zoologicum, Budapest, I, p. 1, fig. 2 (♀). SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 34 (♀).  
 ARNOLD, 1917, Ann. South African Mus., XIV, p. 385 (♀, ♀).

Type locality: Mto-ya-Kifaru, GERMAN EAST AFRICA (Katona).

NATAL: Stamford Hill (I. Trägårdh).

2. *Epitritus marginatus* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 114, fig. 21 (♀, ♀). ALLUAUD and JEANNEL, 1914, Arch. Zool. Gén. Exp., LIII, p. 366.

Type locality: Shimoni, BRITISH EAST AFRICA (Alluaud and Jeannel).

### DOLICHODERINÆ Forel<sup>1</sup>

(Formicinae Mayr, part)

Tapinomini Emery

*Iridomyrmex* MAYR

*Iridomyrmex* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 702. EMERY, 1912, 'Gen. Insect., Dolichoderinæ,' p. 21.

*Liometopum* (part) MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 704.

*Formica* (part) F. SMITH, LOWNE, ROGER. *Tapinoma* (part) F. SMITH, ROGER.

*Acantholepis* (part) LOWNE, 1865, Entomologist, II, p. 332.

*Hypoclinea* (part) MAYR, 1870, Verh. Zool. Bot. Ges. Wien, XX, p. 953.

*Tapinoma* subg. *Doleromyrma* FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 28.

Genotype: *Formica purpurea* F. Smith, 1858 = *Formica detecta* F. Smith, 1858.

1. *Iridomyrmex humilis* (MAYR) EMERY, 1888, Zeitschr. Wiss. Zool., XLVI, p. 386, Pl. XXVIII, figs. 17-19. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 169. H. v. IHERING, 1894, Berlin. Ent. Zeitschr., XXXIX, p. 378. TITUS, 1905, Bull. 52 U. S. Dept. Agric. Bur. Ent., pp. 79-84, fig. 7. NEWELL, 1907, Circ. 13 Louisiana State Crop Pest Com., p. 9. MARTINS, 1907, Broteria, VI, p. 101. FOREL, 1908, Verh. Zool. Bot. Ges. Wien, LVIII, p. 395. FOSTER, 1908, Journ. Econ. Ent., I, pp. 289-293. NEWELL, 1908, 2nd Bien. Rep. Louisiana State Crop Pest Com. (1906-07), pp. 7-9, fig. 1; 1908, Journ. Econ. Ent., I, pp. 21-34 and 152. LOUNSBURY, 1909, Rep. Gov. Ent., Cape Town, (1908), pp. 66-68. WOODWORTH, 1908, Circ. 38 California Agric. Exper. Stat., p. 11, figs. NEWELL and ROSENFELD, 1909, Circ. 27 Louisiana State Crop Pest Com., pp. 112-116, fig. 16. NEWELL, 1909, Journ. Econ. Ent., II, pp. 174-192, fig. 4, and pp. 324-332 (♀, ♀, ♂), Pl. VII; 1909, 3rd Bien. Rep. Louisiana State Crop Pest Com. (1908-09), pp. iv-v. WOODWORTH, 1910, Bull. 207 California Agric. Exper. Stat., pp. 53-83, figs. 1-7. LOUNSBURY, 1910, Rep. Gov. Ent., Cape Town, (1909), pp. 90-91. WHEELER, 1910, 'Ants, Their Structure, etc.,' pp. 153-155, 233, and 542. SAJÓ, 1910, Prometheus, XXI, p. 634, fig. NICKELS, 1911, Journ. Econ. Ent., IV, pp. 353-358. NEWELL, 1911, Bull. 142 Texas Agric. Exper. Stat., p. 37. EMERY, 1912, 'Gen. Insect., Dolichoderinæ,' p. 26, Pl. I, figs. 14, 14b. GALLARDO, 1912, Bol. Soc. Physis, I, p. 133; 1913, *ibid.*, I, p. 264. FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 223 (♀). NEWELL and BARBER, 1913, Bull. 122 U. S. Dept. Agric. Bur. Ent., pp. 1-98, fig. 6 and Pl. IV. ARNOLD 1915, Ann. South African Mus., XIV, p. 145 (♀, ♀, ♂), Pl. IV, figs. 41 and 42. BARBER, 1916, Bull. 377 U. S. Dept. Agric., pp. 1-23. WASMANN, 1917, Ent. Mitt.

<sup>1</sup>Raffray (1887, Rev. d'Ent., Caen, p. 21) and Wasmann (1894, 'Verzeichn. Myrmecoph. Termitoph. Arthrop.,' p. 100) mention a *Bothriomyrmex punicatus* "Rey," from the Cape Colony, evidently a manuscript name. Moreover, no species of the genus *Bothriomyrmex* is at present known from the Ethiopian Region.



Deutsch. Ent. Mus. Berlin, VI, pp. 184-186. C. W. MALLY, 1917, South African Journ. Sci., XIV, pp. 245-247. BARBER, 1920, Farmers' Bull. 1101 U. S. Dept. Agric., pp. 1-11, fig. 1 (♀, ♀, ♂).

*Hypoclinea (Iridomyrmex) humilis* MAYR, 1868, Ann. Soc. Nat. Modena, III, p. 164 (♀); 1870, Verh. Zool. Bot. Ges. Wien, XX, p. 959 (♀).

*Iridomyrmex anceps*? BINGHAM, 1906, Trans. Ent. Soc. London, Proc., p. xxv (♀).

Type locality: Buenos Aires, ARGENTINA (P. de Strobel).

CAPE PROVINCE: Cape Town (Bingham; G. Arnold; H. Brauns). BASUTOLAND: Maseru (R. M. Sloley). Also in MADEIRA (Lounsbury).

### Engramma FOREL

*Engramma* FOREL, 1905, Ann. Soc. Ent. Belgique, XLIX, p. 180. EMERY, 1912, 'Gen. Insect., Dolichoderinae,' p. 38.

*Tapinoma* (part) EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 487.

Genotype: *Engramma lujæ* Forel, 1905.

1. ***Engramma allectum*** STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 394, fig. 9 (♀).

Type locality: Koloka near Angu, BELGIAN CONGO (Schubotz).

2. ***Engramma denticulatum*** WM. M. WHEELER. See p. 205 (♀).

Type locality: Lukolela to Basoko, BELGIAN CONGO (Lang and Chapin).

BELGIAN CONGO: Masaki between Masisi and Walikale (J. Bequaert).

3. ***Engramma gowdeyi*** WM. M. WHEELER. See p. 207 (♀).

Type locality: Kampala, UGANDA (C. C. Gowdey).

4. ***Engramma griseopubens*** WM. M. WHEELER. See p. 206 (♀).

Type locality: Lukolela to Basoko, BELGIAN CONGO (Lang and Chapin).

5. ***Engramma ilgi*** FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 264 (♀, ♂). EMERY, 1912, 'Gen. Insect., Dolichoderinae,' p. 38 (♀, ♂). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 431 (♀).

Type locality: WESTERN ABYSSINIA (Ilg).

BELGIAN CONGO: Makanga (Kohl).

5i. Var. ***stygium*** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 117 (♀, ♀, ♂).

*Engramma stygium* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXIX, p. 363 (♀, ♂). EMERY, 1912, 'Gen. Insect., Dolichoderinae,' p. 38.

Type locality: Nairobi, BRITISH EAST AFRICA (C. Alluaud).

BRITISH EAST AFRICA: Blue Post Hotel, 1520 m.; Lumbwa, Mau Escarpment, 1891 m.; El Burgon to Ndjoro, 2100 m. (Alluaud and Jeannel). GERMAN EAST AFRICA: Mt. Kilimanjaro, 2740 m. (Alluaud and Jeannel).

6. ***Engramma kohli*** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 429 (♀, ♀). See p. 203 (♀).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

BELGIAN CONGO: Niapu (Lang and Chapin); Lubutu to Kirundu; Tshopo River near Stanleyville (J. Bequaert).

7. ***Engramma laurenti*** EMERY, 1912, 'Gen. Insect., Dolichoderinae,' p. 38.

*Tapinoma laurenti* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 487 (♀, ♀).

Type locality: BELGIAN CONGO (Laurent).

CAMEROON: (Conradt).

71. Var. **congolense** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 431 (♀, ♀ ?).  
Type locality: St. Gabriel, BELGIAN CONGO (Kohl).  
BELGIAN CONGO: Bengamisa (Kohl).
8. **Engramma lujæ** FOREL, 1905, Ann. Soc. Ent. Belgique, XLIX, p. 181, fig. (♂, ♂); 1911, Rev. Zool. Afr., I, p. 279 (♀, ♂). EMERY, 1912, 'Gen. Insect., Dolichoderinæ,' p. 38. See p. 203 (♀).  
Type locality: Kondué, BELGIAN CONGO (Luja).  
BELGIAN CONGO: Niapu (Lang and Chapin).  
8a. Subsp. **wasmanni** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 432 (♀, ♀, ♂).  
Type locality: BELGIAN CONGO (Kohl).
9. **Engramma wolff** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 432, fig. 1 (♀).  
See p. 204 (♀, ♀, ♂).  
Type locality: St. Gabriel, BELGIAN CONGO (Kohl).  
BELGIAN CONGO: Akenge; Ngayu; Medje (Lang and Chapin); Walikale to Lubutu (J. Bequaert).
10. **Engramma zimmeri** FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 370 (♀). EMERY, 1912, 'Gen. Insect., Dolichoderinæ,' p. 38.  
Type locality: Amani, GERMAN EAST AFRICA (Zimmer).
- 10a. Subsp. **okiavoense** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 431 (♀).  
Type locality: Okiavo River, near St. Gabriel, BELGIAN CONGO (Kohl).

### Tapinoma FÖRSTER

- Tapinoma* FÖRSTER, 1850, 'Hym. Stud.,' I, p. 43. FOREL, 1878, Bull. Soc. Vaudoise Sc. Nat., XV, p. 385. EMERY, 1912, 'Gen. Insect., Dolichoderinæ,' p. 38.  
*Micromyrma* DUFOUR, 1857, Ann. Soc. Ent. France, (2) V, p. 60. ROGER, 1862; EMERY, 1887.  
*Formica* (part) FABRICIUS, LATREILLE, etc. *Lasius* (part) FABRICIUS, 1804.  
*Myrmica* (part) LEPELETIER, F. SMITH.  
*Technomyrmex* (part) EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 43.  
Genotype: *Tapinoma collina* Förster, 1850 = *Formica erratica* Latreille, 1798.

### Subgenus 1. *Tapinoma* FÖRSTER, *sensu stricto*

Subgenotype: same as genotype.

1. **Tapinoma acuminatum** FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 85 (♀, ♀ ?).  
Type locality: Fundu Island, W. Pemba, BRITISH EAST AFRICA (Voeltzkow).
2. **Tapinoma arnoldi** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 139 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 154 (♀, ♀, ♂), Pl. IV, fig. 44. FOREL, 1916, Rev. Suisse Zool., XXIV, p. 429 (♀ ?).  
Type locality: Plumtree, SOUTHERN RHODESIA (G. Arnold).  
SOUTHERN RHODESIA: Bulawayo (G. Arnold). NATAL: (Haviland).
21. Var. **tectum** (SANTSCHI) EMERY *in litt.*  
*Tapinoma tenue* "FOREL" var. *tectum* SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), p. 288 (♀).  
Type locality: Durban, NATAL (Marley).  
According to information given by Prof. Forel and kindly communicated by Prof. Emery, "*Tapinoma tenue* Forel" was never described and this name was used by mistake for *T. arnoldi*.

3. **Tapinoma danitschi** FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 345 (♀).

Type locality: Durban, NATAL (C. B. Cooper).

NATAL: Umbilo (L. Bevis).

- 3<sub>1</sub>. Var. **bevisi** FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 346 (♀).

Type locality: Umbilo, NATAL (L. Bevis).

NATAL: Durban (C. B. Cooper).

4. **Tapinoma gracile** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 140 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 156 (♀).

Type locality: Matetsi near the Victoria Falls, RHODESIA (G. Arnold).

- 4<sub>1</sub>. Var. **lugubre** SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), p. 288 (♀, ♂).

Type locality: Victoria Falls, RHODESIA (G. Arnold).

5. **Tapinoma luridum** EMERY, 1908, Ann. Soc. Ent. Belgique, LII, p. 188 (♀); 1912, 'Gen. Insect., Dolichoderinae,' p. 41.

Type locality: Sankuru, BELGIAN CONGO (Luja).

- 5a. Subsp. **connexum** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 118, fig. 22 (♀, ♂).

Type locality: Lumbwa, Mau Escarpment, 1897 m., BRITISH EAST AFRICA (Alluaud and Jeannel).

- 5b. Subsp. **longiceps** WM. M. WHEELER. See p. 209 (♀).

Type locality: Zambi, BELGIAN CONGO (Lang, Chapin and Bequaert).

6. **Tapinoma luteum** (EMERY) MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru., etc.,' II, 8, p. 18 (♀). EMERY, 1912, 'Gen. Insect., Dolichoderinae,' p. 42. SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 35 (♀). TRÄGÅRDH, ibid., p. 45. SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 118 (♀, ♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 152 (♀).

*Technomyrmex luteus* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 43 (♀).

Type locality: Makapan, TRANSVAAL (E. Simon).

ZULULAND: Junction of the Umfolosi Rivers (I. Trägårdh). GERMAN EAST AFRICA: Meru Plain (Sjöstedt). BRITISH EAST AFRICA: River Ramisi; Shimoni (Alluaud and Jeannel).

- 6a. Subsp. **emeryi** (FOREL) EMERY, 1912, 'Gen. Insect., Dolichoderinae,' p. 42. ARNOLD, 1915, Ann. South African Mus., XIV, p. 152 (♀, ♀, ♂).

- Technomyrmex luteus* subsp. **emeryi** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 447 (♀, ♂).

Type locality: NATAL (Haviland).

SOUTHERN RHODESIA: Bulawayo (G. Arnold).

7. **Tapinoma melanocephalum** (FABRICIUS) MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 651. FOREL, 1881, Mitth. München. Ent. Ver., V, p. 3 (♀). MAYR, 1886, Verh. Zool. Bot. Ges. Wien, XXXVI, p. 359. EMERY, 1887, Ann. Mus. Civ. Genova, XXIV, p. 249 (♀, ♂). BIELUPS, 1887, Trans. Ent. Soc. London, Proc., p. xxvii. EMERY, 1888, Zeitschr. Wiss. Zool., XLVI, p. 392, Pl. XXIX, figs. 37-38. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 165. BINGHAM, 1903, 'Fauna Brit. India, Hym.,' II, p. 304 (♀). EMERY, 1912, 'Gen. Insect., Dolichoderinae,' p. 41. SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 377 (♀, ♀). See p. 1034.

*Formica melanocephala* FABRICIUS, 1793, Ent. Syst., II, p. 353. COQUEBERT, 1799, 'Illustr. Iconogr. Ins.,' I, p. 25 (♀), Pl. VI, fig. 8. LATREILLE, 1802, 'Hist. Nat. Fourmis,' p. 269 (♀). F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 46.

*Lasius melanocephalus* FABRICIUS, 1804, 'Syst. Piez.', p. 417.

*Myrmica melanocephala* LEPELETIER, 1836, 'Hist. Nat. Ins. Hym.', I, p. 185.

*Formica nana* JERDON, 1851, Madras Journ. Litt. Sc., XVII, p. 125 (♀); 1854, Ann. Mag. Nat. Hist., (2) XIII, p. 108 (♀).

*Myrmica pellucida* F. SMITH, 1858, Journ. Proc. Linn. Soc. London, Zool., II, p. 71 (♀).

*Myrmica (Monomarium) pellucida* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.', VI, p. 124 (♀).

*Formica familiaris* F. SMITH, 1860, Journ. Proc. Linn. Soc. London, Zool., IV, Suppl., p. 96 (♀).

*Micromyrma melanocephala* ROGER, 1862, Berlin. Ent. Zeitschr., VI, p. 258 (♀, ♀).

Type locality: Cayenne, FRENCH GUIANA.

Tropicopolitan. FRENCH GUINEA: Konakry (F. Silvestri).

8. **Tapinoma minimum** MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 147 (♀, ♀). H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 39. EMERY, 1912, 'Gen. Insect., Dolichoderinae,' p. 41. SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 35 (♀). TRÄGÅRDH, *ibid.*, p. 45.

Type locality: Tanga, GERMAN EAST AFRICA (H. Brauns).

ZULULAND: Dukudu (I. Trägårdh).

9. **Tapinoma voeltzkowi** FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 84 (♀, ♂ ?).

Type locality: Fundu Island, W. Pemba, BRITISH EAST AFRICA (Voeltzkow).

GERMAN EAST AFRICA: Malindi (Voeltzkow).

9. Var. **rhodesiae** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 139 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 155 (♀), Pl. iv, fig. 43.

Type locality: Bulawayo, SOUTHERN RHODESIA (G. Arnold).

## Subgenus 2. **Ecphorella** FOREL

*Tapinoma* subg. *Ecphorella* FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 65. EMERY, 1912, 'Gen. Insect., Dolichoderinae,' p. 42.

Subgenotype: *Tapinoma (Ecphorella) wellmani* Forel, 1909.

10. **Tapinoma (Ecphorella) wellmani** FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 66 (♀). EMERY, 1912, 'Gen. Insect., Dolichoderinae,' p. 42.

Type locality: BENGUELA (C. Wellman).

## **Technomyrmex** MAYR

*Technomyrmex* MAYR, 1872, Ann. Mus. Civ. Genova, II, p. 147. FOREL, 1878, Bull. Soc. Vaudoise Sc. Nat., XV, p. 380. EMERY, 1912, 'Gen. Insect., Dolichoderinae,' p. 42.

*Tapinoma* (part) F. SMITH, MAYR.

Genotype: *Technomyrmex strenuus* Mayr, 1872.

1. **Technomyrmex albipes** (F. SMITH) EMERY, 1888, Zeitschr. Wiss. Zool., XLVI, pp. 392, 394, Pl. XXIX, fig. 49. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 166. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 74; 1895, Journ. Bombay Nat. Hist. Soc., IX, p. 466 (♀). BINGHAM, 1903, 'Fauna Brit. India, Hym.,' II, p. 301, fig. 91 (♀). FOREL, 1908, Bull. Soc. Vaudoise Sc. Nat., (5) XLIV, p. 21 (♂ ergatom.). EMERY, 1912, 'Gen. Insect., Dolichoderinae,' p. 43. See p. 1035.

*Formica (Tapinoma) albipes* F. SMITH, 1862, Journ. Proc. Linn. Soc. London, Zool., VI, p. 38 (♀).

*Tapinoma nigrum* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 703 (♀); 1865, 'Reise Novara, Zool., II, Formicidæ,' p. 62 (♀); 1867, Tijdschr. v. Ent., X, p. 78 (♀).

*Tapinoma albitarse* MOTSCHOUJSKY, 1863, Bull. Soc. Nat. Moscou, XXXVI, 3, p. 14 (♀, ♀).

*Tapinoma albipes* MAYR, 1876, Journ. Mus. Godeffroy, XII, p. 83.

Type locality: Tondano, CELEBES (A. R. Wallace).

DELAGOA: (Liengme).

1. Var. *bruneipes* FOREL, 1895, Journ. Bombay Nat. Hist. Soc., IX, p. 466 (♀). EMERY, 1912, 'Gen. Insect., Dolichoderinæ,' p. 43.

*Technomyrmex albipes* var. *brunneipes* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 391.

Type locality: INDIA; not otherwise designated.

FRENCH CONGO: Mbamu (A. Weiss).

1a. Subsp. *foreli* EMERY, 1893, Ann. Soc. Ent. France, LXII, p. 249 (♀); 1895, *ibid.*, LXIV, p. 43. WASMANN, 1899, Notes Leyden Mus., XXI, p. 51. FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 446 (♀, ♀, ♂). EMERY, 1912, 'Gen. Insect., Dolichoderinæ,' p. 43. FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 140 (♀); 1913, Deutsch. Ent. Zeitschr., Beih., p. 223 (♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 377 (♀); 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 35 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 150 (♀, ♀, ♂), Pl. iv, fig. 40. REICHENSBERGER, 1915, Med. Göteborgs Mus. Zool. Afd., V, pp. 45 and 73. SKAIFE, 1921, Trans. Roy. Soc. South Africa, IX, 3, p. 221. See p. 1035.

Type locality: MADAGASCAR.

ANGOLA: St. Paul de Loanda (F. Silvestri). ORANGE FREE STATE: Bloemfontein (E. Simon). NATAL: (R. C. Wroughton; L. v. Muralt; Haviland); Durban (G. Arnold); Mountain Rise near Pietermaritzburg (Skaife). ZULULAND: Dukudu (I. Trägårdh). CAPE PROVINCE: Willowmore (H. Brauns); Vrijburg (E. Simon).

1a. Var. *affinis* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 119 (♀).

Type locality: Naivasha, Rift Valley, 1900 m., BRITISH EAST AFRICA (Alluaud and Jeannel).

BRITISH EAST AFRICA: Molo, Mau Escarpment, 2080 m. (Alluaud and Jeannel).

2. *Technomyrmex andrei* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 488, fig. (♀, ♀); 1912, 'Gen. Insect., Dolichoderinæ,' p. 43.

*Technomyrmex mayri* ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 3 (♀) (*nec* Forel).

Type locality: Ogowé, FRENCH CONGO (Mocquerys).

CAMEROON: (Conradt). BELGIAN CONGO: Kinshasa (Waelbroeck).

2. Var. *camerunensis* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 489 (♀); 1912, 'Gen. Insect., Dolichoderinæ,' p. 43.

Type locality: CAMEROON.

2. Var. *schereri* FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 283 (♀). EMERY, 1912, 'Gen. Insect., Dolichoderinæ,' p. 43.

Type locality: Cape Mount, LIBERIA (Scherer).

3. **Technomyrmex arnoldinus** FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 222 (♀). ARNOLD, 1915, Ann. South African Mus., XIV, p. 148 (♀), Pl. iv, figs. 39, 39a.

Type locality: Bulawayo, SOUTHERN RHODESIA (G. Arnold).

NATAL: Durban (C. B. Cooper).

4. **Technomyrmex hypoclinoides** SANTSCHI, 1919, Rev. Zool. Afr., VII, p. 89 (♀).

Type locality: Avakubi, BELGIAN CONGO (J. Bequaert).

5. **Technomyrmex moerens** SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 312, fig. 4 (♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 377 (♀).

Type locality: Mbamu, FRENCH CONGO (A. Weiss).

FRENCH GUINEA: Kakoulima (F. Silvestri).

6. **Technomyrmex nigriventris** SANTSCHI, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 22, footnote (♀); 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 391 (♀). EMERY, 1912, 'Gen. Insect., Dolichoderinae,' p. 44. ARNOLD, 1915, Ann. South African Mus., XIV, p. 149 (♀). See p. 210 (♀).

*Technomyrmex nigriventris* "SANTSCHI" FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 54 (♀, ♂), without description.

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

BELGIAN CONGO: Kinshasa (Waelbroeck); Thysville (J. Bequaert).

6a. Subsp. **albinasis** FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 22 (♀). EMERY, 1912, 'Gen. Insect., Dolichoderinae,' p. 44. ARNOLD, 1915, Ann. South African Mus., XIV, p. 150 (♀).

Type locality: Table Mt. near Cape Town, CAPE PROVINCE (L. Schultze).

7. **Technomyrmex pilipes** EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 490 (♀). FOREL, 1901, Mitt. Naturh. Mus. Hamburg, XVIII, p. 65 (♀). EMERY, 1912, 'Gen. Insect., Dolichoderinae,' p. 44 (♀).

Type locality: CAMEROON (Conradt).

FRENCH CONGO: (Dinklage).

8. **Technomyrmex schoutedeni** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 447 (♀, ♀, ♂). EMERY, 1912, 'Gen. Insect., Dolichoderinae,' p. 44.

Type locality: Bena Dibebe, BELGIAN CONGO (Luja)

9. **Technomyrmex semiruber** EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 489 (♀).

Type locality: CAMEROON (Conradt).

### **Semonius** FOREL

*Semonius* FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 21. EMERY, 1912, 'Gen. Insect., Dolichoderinae,' p. 44.

Genotype: *Semonius schultzei* Forel, 1910.

1. **Semonius schultzei** FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 21 (♀). EMERY, 1912, 'Gen. Insect., Dolichoderinae,' p. 44. SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 120, figs. 23 and 24 (♀, ♂). ARNOLD, 1915, Ann. South African Mus., XIV, p. 157 (♀, ♀, ♂), Pl. iv, fig. 45. FOREL, 1916, Rev. Suisse Zool., XXIV, p. 429 (♀).

*Semonius schultzei* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 139 (♀).

Type locality: Khakhea, BECHUANALAND (L. Schultze).

BELGIAN CONGO: St. Gabriel (Kohl). SOUTHERN RHODESIA: Redbank (G. Arnold). NATAL: Durban (Marley). GERMAN EAST AFRICA: Kilema, 1440 m., Mt. Kilimanjaro (Alluaud and Jeannel).

### FORMICINÆ Lepeletier

(Formicinæ Mayr, part; Camponotinæ Forel)

#### Santschiellini Forel

##### Santschiella FOREL

*Santschiella* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 434.

Genotype: *Santschiella kohli* Forel, 1916.

1. *Santschiella kohli* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 435, figs. 2-4 (♀).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

#### Plagiolepidini Forel

##### Acropyga ROGER

*Acropyga* ROGER, 1862, Berlin. Ent. Zeitschr., VI, p. 242.

*Plagiolepis* (part) MAYR.

Genotype: *Acropyga acutiventris* Roger, 1862.

1. *Acropyga silvestrii* EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 21, fig. 11 (♀).

Type locality: Ghinda, ERITREA (F. Silvestri).

##### Plagiolepis MAYR

*Plagiolepis* MAYR, 1861, 'Europ. Formicid.', p. 42.

*Formica* (part) LATREILLE. *Prenolepis* (part) MAYR. *Tapinoma* (part) SCHENCK, MAYR.

Genotype: *Formica pygmaea* Latreille, 1798.

#### Subgenus 1. *Plagiolepis* MAYR, *sensu stricto*

Subgenotype: same as genotype.

1. *Plagiolepis alluaudi* EMERY, 1894, Ann. Soc. Ent. France, LXIII, p. 71 (♀). FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 30 (♀, ♀). DONISTHORPE, 1908, Bull. Misc. Inform. Bot. Gard. Kew, III, p. 122; 1908, Trans. Leicester Lit. Phil. Soc., XII, p. 229; 1915, 'British Ants,' p. 343. See p. 1035.

- (♀). *Plagiolepis flavidula* ERN. ANDRÉ, 1881, 'Spec. Hym. Europ. Algérie,' II, p. 208 (♀). E. SAUNDERS, 1896, 'Hym. Acul. British Islands,' p. 26 (♀) (*nec* Roger).

Type locality: La Misère, Mahé, SEYCHELLES (C. Alluaud).

Introduced in greenhouses in Europe and apparently spreading.

GERMAN EAST AFRICA: Arusha-chini (Katona).

2. *Plagiolepis brunni* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 148 (♀). FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 449 (♀); 1913, *ibid.*, LVII, p. 140 (♀). SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 35 (♀, ♂); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 377 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 121 (♀).

- (♀, ♀, ♂). *Plagiolepis brunni* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 248 (♀, ♀, ♂).

Type locality: Delagoa Bay, PORTUGUESE EAST AFRICA (H. Brauns).

FRENCH GUINEA: Maniou (F. Silvestri). BRITISH EAST AFRICA: Ramisi River; Shimon (Alluaud and Jeannel). RHODESIA: Bulawayo; Springvale (G. Arnold). ZULULAND: Umfolosi (I. Trägårdh). NATAL: Richmond (I. Trägårdh); Durban (Haviland; G. Arnold).

21. Var. *nilotica* MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicid.,' p. 7 (♀). EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 19 (♀).

*Plagiolepis brunni* subsp. *nilotica* FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 30 (♀).

Type locality: Kaka, White Nile, ANGLO-EGYPTIAN SUDAN (I. Trägårdh).

ERITREA: Nefasit (F. Silvestri). GERMAN EAST AFRICA: Kibosho (Katona).

22. Var. *pubescens* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 140 (♀). SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 35 (♀). TRÄGÅRDH, *ibid.*, p. 45.

Type locality: Plumtree, SOUTHERN RHODESIA (G. Arnold).

ZULULAND: Umfolosi (I. Trägårdh).

3. *Plagiolepis capensis* MAYR, 1865, 'Reise Novara, Zool.,' II, Formicidæ, p. 55 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 172. FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 24 (♀).

Type locality: Cape of Good Hope (Novara Expedition).

CAPE PROVINCE: Kamaggas (L. Schultze).

4. *Plagiolepis exigua* FOREL, 1894, Journ. Bombay Nat. Hist. Soc., VIII, pp. 415 and 417 (♀, ♀). BINGHAM, 1903, 'Fauna Brit. India, Hym.,' II, p. 323. FOREL, 1913, Rev. Zool. Afr., II, p. 338 (♀). BEQUAERT, *ibid.*, p. 429. FOREL, 1916, Rev. Suisse Zool., XXIV, p. 437 (♀). See p. 1035.

Type locality: Poona, INDIA (Wroughton).

BELGIAN CONGO: (Kohl); Lake Kabwe (J. Bequaert).

4a. Subsp. *abyssinica* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 73 (♀); 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 266 (♀).

Type locality: SOUTHERN ABYSSINIA (Ilg).

ERITREA: (K. Escherich).

5. *Plagiolepis funicularis* SANTSCHI, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 344 (♀).

Type locality: NATAL, 3500 ft. (Haviland).

6. *Plagiolepis fuscula* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 45 (♀). FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 449 (♀). SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 36 (♀).

Type locality: Cape Town, CAPE PROVINCE (E. Simon).

NATAL: (Haviland); Stamford Hill (I. Trägårdh).

7. *Plagiolepis mediorufa* (FOREL). See p. 213.

*Plagiolepis pygmæa* var. *mediorufa* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 437 (♀).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

BELGIAN CONGO: Stanleyville (Lang and Chapin).

8. *Plagiolepis pygmæa* (LATREILLE) MAYR, 1861, 'Europ. Formicid.,' p. 43 (♀, ♀, ♂). SCHENCK, 1861, Jahrb. Ver. Naturk. Nassau, XVI, p. 200 (♀, ♀, ♂); 1864, Progr. Gymnas. Weilburg, p. 13 (♀, ♀, ♂). FOREL, 1874, Nouv. Mém. Soc. Helvét. Sci. Nat. Zurich, XXVI, pp. 45 and 338 (♀, ♀, ♂). ERN. ANDRÉ, 1874,



Rev. Mag. Zool., (3) II, p. 179 (♀, ♀, ♂). MAYR, in Fedtschenko, 1877, 'Voy. Turkestan, Formicid.,' p. 5. ERN. ANDRÉ, 1882, 'Spec. Hym. Europ. Algérie,' II, pp. 208, 209 (♀, ♀, ♂), Pls. VI and VII. LUBBOCK, 1882, 'Ants, Bees and Wasps,' Ed. 5, p. 11. FOREL, 1888, Berlin. Ent. Zeitschr., XXXII, p. 265. BRYANT, 1890, 'Fourmis France Centr.,' p. 56. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 173. FOREL, 1902, Ann. Soc. Ent. Belgique, XLVI, p. 155 (♀). SANTSCHI, 1908, Ann. Soc. Ent. France, LXXVII, p. 517. FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 224 (♀, ♀).

*Formica pygmaea* LATREILLE, 1798, 'Ess. Hist. Fourmis France,' p. 45 (♀, ♀); 1802, 'Hist. Nat. Fourmis,' p. 183 (♀). LEPELETIER, 1836, 'Hist. Nat. Ins. Hym.,' I, p. 209 (♀, ♀).

*Tapinoma pygmaea* SCHENCK, 1852, Jahrb. Ver. Naturk. Nassau, VIII, pp. 68, 130 (♀, ♀, ♂); 1853, Stettin. Ent. Zeitg., XIV, p. 185 (♀, ♀, ♂). F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 56.

*Tapinoma pygmaeum* MAYR, 1855, Verh. Zool. Bot. Ges. Wien, V, p. 375 (♀, ♀, ♂); 1856, Progr. Realsch. Pest, p. 15 (♀). GREDLER, 1858, VIII. Progr. Gymnas. Bozen, p. 15.

*Formica (Tapinoma) pygmaea* NYLANDER, 1856, Ann. Sc. Nat. Zool., (4) V, p. 72 (♀, ♀, ♂), Pl. III, figs. 6 and 22.

Type locality: FRANCE.

SOUTHERN EUROPE, NORTH AFRICA, ASIA MINOR, CANARIES. RHODESIA: Bulawayo; Bembesi (G. Arnold).

81. Var. *intermedia* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 45 (♀, ♀, ♂). FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 448 (♀, ♀); 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 248 (♀).

Type locality: Bloemfontein, ORANGE FREE STATE (E. Simon).

CAPE PROVINCE: Cape Town; Vrijburg (E. Simon). BASUTOLAND: (R. C. Wroughton). NATAL: (R. C. Wroughton); Isipingo (C. B. Cooper).

82. Var. *punctum* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 448 (♀, ♂). SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 35 (♀, ♀). FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 248 (♀); 1916, Rev. Suisse Zool., XXIV, p. 437 (♀).

Type locality: Mountains of NATAL (R. C. Wroughton).

NATAL: Richmond (I. Trägårdh); Durban. BASUTOLAND: (R. C. Wroughton). BELGIAN CONGO: St. Gabriel (Kohl).

## Subgenus 2. *Anacantholepis* SANTSCHI

*Plagiolepis* subg. *Anacantholepis* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 36.

Subgenotype: *Plagiolepis (Anacantholepis) decora* Santschi, 1914.

9. *Plagiolepis (Anacantholepis) bothæ* FOREL.

*Plagiolepis bothæ* FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 86 (♀, ♂).

Type locality: Fundu Island, W. Pemba, BRITISH EAST AFRICA (Voeltzkow).

10. *Plagiolepis (Anacantholepis) decora* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 36, fig. 9 (♀).

Type locality: Stamford Hill, NATAL (I. Trägårdh).

11. *Plagiolepis (Anacantholepis) deweti* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 249.

*Plagiolepis deweti* FOREL, 1904, Ann. Soc. Ent. Belgique, XLVIII, p. 423 (♀).

Type locality: Mountains of NATAL (R. C. Wroughton).

CAPE PROVINCE: Cape of Good Hope (Burchell); King William's Town (R. Godfrey).

12. *Plagiolepis (Anacantholepis) jouberti* FOREL. SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 122 (♀).

*Plagiolepis jouberti* FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 23 (♀).

Type locality: Kamaggas, CAPE PROVINCE (L. Schultze).

BRITISH EAST AFRICA: Shimoni (Alluaud and Jeannel).

13. *Plagiolepis (Anacantholepis) pictipes* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 122, fig. 25 (♀).

Type locality: Mbuyuni, Pori, 1110 m., BRITISH EAST AFRICA (Alluaud and Jeannel).

14. *Plagiolepis (Anacantholepis) vanderkelleni* FOREL.

*Plagiolepis vanderkelleni* FOREL, 1894, Mitth. Schweiz. Ent. Ges., X, p. 310 (♀); in Baum, 1903, 'Kunene-Sambesi Expedition,' p. 564 (♀).

Type locality: between the Cubango and Cuito Rivers, MOSSAMEDES (Baum and Van der Kellen).

14i. Var. *tricolor* FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 24 (♀).

Type locality: Kooa to Sekgoma, BECHUANALAND (L. Schultze).

14a. Subsp. *polita* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 37, fig. 10 (♀).

Type locality: Stamford Hill, NATAL (I. Trägårdh).

### Subgenus 3. *Anoplolepis* SANTSCHI

*Plagiolepis* subg. *Anoplolepis* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 123.

Subgenotype: *Formica longipes* Jerdon, 1851.

15. *Plagiolepis (Anoplolepis) braunsi* FOREL.

*Plagiolepis braunsi* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 141 (♀).

*Plagiolepis (Anoplolepis) braunsi* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 123.

Type locality: Willowmore, CAPE PROVINCE (H. Brauns).

16. *Plagiolepis (Anoplolepis) carinata* EMERY. SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 123.

*Plagiolepis carinata* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 491 (♀, ♀). FOREL, 1907, Mitt. Naturh. Mus. Hamburg, XXIV, p. 15 (♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 391 (♀, ♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 354 (♀).

Type locality: CAMEROON (Conradt).

FRENCH CONGO: Brazzaville (A. Weiss). BELGIAN CONGO: Mayombe (Deleval).

17. *Plagiolepis (Anoplolepis) custodiens* (F. SMITH) SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 123 (♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 377 (♀); 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 38 (♀, ♀, ♂). See p. 213.

*Formica custodiens* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 33 (♀). ROGER, 1863, 'Verzeich. Formicid.,' p. 15. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 414.

*Camponotus hendecarthrus* ROGER, 1863, Berlin. Ent. Zeitschr., VII, p. 128 (♀, ♀); 1863, 'Verzeich. Formicid.,' p. 2. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 458.

*Formica berthoudi* FOREL, 1876, Bull. Soc. Vaudoise Sc. Nat., (2) XIV, p. 33 (♀).

*Plagiolepis custodiens* MAYR, 1866, Sitzb. Ak. Wiss. Wien, LIII, Abt. 1, p. 493. FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 215 (♀). EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 117 (♀). FOREL, 1892, Mitth. Schweiz. Ent. Ges., VIII, p. 350 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 172. MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 197. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 73. EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 43. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 148 (♀, ♀, ♂). WASMANN, 1896, Notes Leyden Mus., XVIII, p. 75. H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 39. EMERY, 1899, Ann. Soc. Ent. Belgique, XLV, p. 491 (♀, ♀). WASMANN, 1900, Illustr. Zeitschr. Ent., V, p. 103; 1904, Notes Leyden Mus., XXV, pp. 15, 73, and 75. ZAVATTARI, 1907, Boll. Mus. Zool. Anat. Comp. Torino, XXII, No. 550, p. 2 (♀). KOLBE, 1907, Ann. Soc. Ent. Belgique, LI, p. 364. FOREL, 1909, *ibid.*, LIII, p. 54 (♀); in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 23 (♀, ♀, ♂). WASMANN, 1911, Tijdschr. v. Ent., LIV, p. 202; 1912, Zeitschr. Wiss. Zool., CI, p. 106. TRÄGÄRDH, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 46. REICHENSBERGER, 1915, *ibid.*, V, p. 18. WASMANN, 1917, Ent. Mitt. Deutsch. Ent. Mus. Berlin, VI, p. 185; 1920, Tijdschr. v. Ent., LXII, (1919), pp. 119 and 120. LAMBORN, 1920, Trans. Ent. Soc. London, (1919), Proc., p. lvi.

Type locality: Port Natal, NATAL.

BELGIAN CONGO: Banana (Busschodts; Lang and Chapin). ANGOLA: St. Paul de Loanda (F. Silvestri); San Antonio (Lang and Chapin). RHODESIA: Kazungula (Jallá). GERMAN SOUTHWEST AFRICA: (Lübbert); Okahandja (Dinter). BECHUANALAND: Lehututu to Kang; Khakhea to Kang; Kooa to Sekgoma (L. Schultze). CAPE PROVINCE: Kimberley; Vrijburg (E. Simon); Willowmore (H. Brauns). NATAL: Pietermaritzburg (I. Trägårdh); Malvern (O'Neil); Durban. BASUTOLAND: Lessouto (P. Berthoud). ORANGE FREE STATE: Bothaville (H. Brauns). TRANSVAAL: Lydenburg (Wilms); Makapan; Pretoria; Hamman's Kraal (E. Simon); Valdezia (P. Berthoud). ZULULAND: Umfolosi (I. Trägårdh). PORTUGUESE EAST AFRICA: Delagoa Bay (Liengme). GERMAN EAST AFRICA: Daressalaam (H. Brauns); Bagamoyo (Stuhlmann; Le Roy). ZANZIBAR. BRITISH EAST AFRICA: Kikuyu Escarpment, 2250 m. (Alluaud and Jeannel). SOMALILAND: (C. Keller).

171. Var. *detrita* EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 118 (♀). FOREL, 1892, Mitth. Schweiz. Ent. Ges., VIII, p. 350 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 172.

Type locality: Obbia, SOMALILAND (Bricchetti-Robecchi).

SOMALILAND: (C. Keller).

172. Var. *hirsuta* EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 118 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 172.

Type locality: Ellahelaj, SOMALILAND (Bricchetti-Robecchi).

173. Var. *pilipes* EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 118 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 172. EMERY, 1895, Ann. Mus. Civ. Genova, XXXV, p. 180; 1897, *ibid.*, XXXVIII, p. 601.

Type locality: Milmil, SOMALILAND (Bricchetti-Robecchi).

ABYSSINIA: Ogaden (Ruspoli); Boran Galla, Middle Ganale; Webi (Bricchetti-Robecchi). SOMALILAND: Wells of Laffarugh to wells of Aberio (V. Bottego).

17a. Subsp. *fallax* (MAYR) EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 43. FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 249 (♀).

*Plagiolepis fallax* MAYR, 1865, 'Reise Novara, Zool.,' II, Formicidae, p. 54 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 172. WASMANN, 1894, 'Verzeichn. Myrmecoph. Termitoph. Arthrop.,' p. 113; 1896, Notes Leyden Mus., XVIII, p. 75. E. SIMON, 1899, Bull. Soc. Ent. France, p. 179. WASMANN, 1900, Zool. Jahrb. Abt. Syst., XIV, p. 68. PÉRINGUEY, 1900, Ann. Soc. Ent. France, LXIX, p. 67. FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 54 (♀ ?); 1910, *ibid.*, LIV, p. 449 (♀); in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 24 (♀, ♀).

*Plagiolepis (Anoplolepis) custodiens* var. *fallax* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 377 (♀).

Type locality: Cape of Good Hope (Novara Expedition; Raffray).

CAPE PROVINCE: Constantia (F. Silvestri); Stormsvlei; Swellendam (F. Purcell); Cape Town (Wilms; E. Simon); Willowmore (H. Brauns). NATAL: (Haviland). BELGIAN CONGO: Umangi (Wilwerth; this record probably does not refer to the subsp. *fallax*).

18. *Plagiolepis (Anoplolepis) decolor* EMERY.

*Plagiolepis decolor* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 44 (♀). FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 23 (♀, ♀, ♂).

Type locality: Kimberley, CAPE PROVINCE (E. Simon).

TRANSVAAL: Hamman's Kraal (E. Simon). GERMAN SOUTHWEST AFRICA: Cape Cross (L. Schultze). BECHUANALAND: Khakhea to Kooa (L. Schultze).

19. *Plagiolepis (Anoplolepis) longipes* (JERDON) SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 123. See p. 1036.

*Formica longipes* JERDON, 1851, Madras Journ. Litt. Sc., XVII, p. 122 (♀); 1854, Ann. Mag. Nat. Hist., (2) XIII, p. 105 (♀).

*Formica gracilipes* F. SMITH, 1857, Journ. Proc. Linn. Soc. London, Zool., II, p. 55 (♀); 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 22 (♀).

*Formica trifasciata* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 27 (♀).

*Prenolepis gracilipes* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 698.

*Plagiolepis gracilipes* MAYR, 1867, Tijdschr. v. Ent., X, p. 73 (♀, ♀); 1870, Verh. Zool. Bot. Ges. Wien, XX, p. 947. ROTHNEY, 1889, Trans. Ent. Soc. London, p. 373. MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 197.

*Plagiolepis longipes* EMERY, 1887, Ann. Mus. Civ. Genova, XXIV, p. 247; 1888, Zeitschr. Wiss. Zool., XLVI, p. 385, Pl. XXVII, figs. 8-9. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 173. FOREL, 1894, Journ. Bombay Nat. Hist. Soc., VIII, p. 414 (♀). MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 149. H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 39. BINGHAM, 1903, 'Fauna Brit. India, Hym.,' II, p. 320, fig. 97 (♀).

Type locality: INDIA (Jerdon).

Tropicopolitan. ZANZIBAR: (H. Brauns; Stuhlmann).

20. *Plagiolepis (Anoplolepis) nuptialis* SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), p. 239 (♂).

Type locality: Willowmore, CAPE PROVINCE (G. Arnold).

CAPE PROVINCE: Keurbooms River near Plettenberg Bay (H. Brauns).

**21. *Plagiolepis (Anoplolepis) opaciventris* EMERY.**

*Plagiolepis opaciventris* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 492 (♀).

*Plagiolepis steingröveri* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 44 (♀; nec ♀, nec Forel).

Type locality: Gaboon, FRENCH CONGO.

**22. *Plagiolepis (Anoplolepis) rufescens* SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), p. 289 (♀).**

Type locality: Cape Town, CAPE PROVINCE (Reichensperger).

**23. *Plagiolepis (Anoplolepis) steingröveri* FOREL. See p. 1036.**

*Plagiolepis steingröveri* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 72 (♂); 1910, Ann. Soc. Ent. Belgique, LIV, p. 449 (♂); in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 23 (♂); 1911, Sitzb. Bayer. Akad. Wiss., p. 287 (♂).

*Plagiolepis steingröveri* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 44 (♂; nec ♀). WASMANN, 1904, Notes Leyden Mus., XXV, pp. 73 and 75; 1911, Tijdschr. v. Ent., LIV, p. 202; 1912, Zeitschr. Wiss. Zool., CI, p. 106; 1920, Tijdschr. v. Ent., LXII, (1919), p. 120.

*Plagiolepis (Anoplolepis) steingröveri* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 123.

Type locality: Angra Pequena, GERMAN SOUTHWEST AFRICA (Steingröver).

MOSSAMEDES: (Baum and Van der Kellen). GERMAN SOUTHWEST AFRICA: (Lübbert); Lüderitzbucht (L. Schultze). BECHUANALAND: Kooa; Severelela to Khakhea (L. Schultze). CAPE PROVINCE: Cape Town (E. Simon; Wilms); Willowmore (H. Brauns). ORANGE FREE STATE: Bothaville (H. Brauns); Bloemfontein (E. Simon). TRANSVAAL: Makapan; Hebron (E. Simon).

**24. *Plagiolepis (Anoplolepis) tenella* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 123. See p. 214.**

*Plagiolepis tenella* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXIX, p. 364 (♂); 1911, Rev. Zool. Afr., I, p. 210 (♂). FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 61 (♀; without description).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

BELGIAN CONGO: Lower Congo, in stomach of *Manis temmincki* (Solon); Niapu; Akenge; Medje; Bafwasende; Garamba (Lang and Chapin).

**25. *Plagiolepis (Anoplolepis) trimeni* FOREL.**

*Plagiolepis trimenii* FOREL, 1895, Ann. Soc. Ent. Belgique, XXXIX, p. 430 (replete ♀).

*Plagiolepis trimeni* EMERY, 1899, *ibid.*, XLIII, p. 492 (♀). GILCHRIST, 1910, Agric. Journ. Cape of Good Hope, XXXVI, p. 328. FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 223 (♀).

Type locality: NATAL (Mutschinson).

RHODESIA: Bulawayo; Bembesi (G. Arnold).

**26. *Plagiolepis (Anoplolepis) tumidula* EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 19, fig. 10 (♀, ♂).**

Type locality: Ghinda, ERITREA (F. Silvestri).

***Acantholepis* MAYR**

*Acantholepis* MAYR, 1861, 'Europ. Formicid.,' p. 42.

*Formica* (part) F. SMITH. *Hypoclinea* (part) MAYR, ROGER.

Genotype: *Hypoclinea frauenfeldi* Mayr, 1855.

1. *Acantholepis arenaria* ARNOLD, 1920, Ann. South African Mus., XIV, pp. 555 and 560, fig. 56 (♀).

Type locality: Sawmills, Umgusa River, SOUTHERN RHODESIA (G. Arnold).

2. *Acantholepis arnoldi* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 142 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 556 and 563 (♀).

Type locality: Bulawayo, RHODESIA (G. Arnold).

RHODESIA: Redbank (G. Arnold).

3. *Acantholepis capensis* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, pp. 699 (♀) and 770 (♂); 1863, *ibid.*, XIII, p. 394. ROGER, 1863, 'Verzeich. Formicid.,' p. 11. MAYR, 1865, 'Reise Novara, Zool.,' II, Formicidae, p. 56 (♀, ♂), Pl. II, fig. 16. EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 366 (♀, ♀, ♂). MAGRETTI, 1884, *ibid.*, XXI, p. 537 (♀); 1884, Bull. Soc. Ent. Italiana, XV, (1883) p. 244 (♀). PÉRINGUEY, 1886, Trans. Ent. Soc. London, Proc., p. xxxvi. FOREL, 1892, Ann. Soc. Ent. Belgique, XXXVI, p. 42 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 171. WASMANN, 1894, 'Verzeichn. Myrmecoph. Termitoph. Arthrop.,' pp. 108, 118, and 215. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 74. EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 46. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 149. EMERY, 1895, Ann. Mus. Civ. Genova, XXXV, p. 180 (♀). WASMANN, 1896, Notes Leyden Mus., XVIII, p. 76; 1898, Wien. Ent. Zeitg., XVII, p. 97; 1899, Notes Leyden Mus., XXI, pp. 39 and 51. FOREL, 1901, Mitth. Schweiz. Ent. Ges., X, p. 311; in Baum, 1903, 'Kunene-Sambesi Expedition,' p. 564; 1904, Mém. Ac. Sc. St. Pétersbourg, IX, (1903), p. 387 (♀). WASMANN, 1904, Notes Leyden Mus., XXV, pp. 37 and 73. DIXEY and LONGSTAFF, 1907, Trans. Ent. Soc. London, pp. 310 and 379. FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 54 (♀, ♀); in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 25 (♀, ♀, ♂); 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 265 (♀, ♀, ♂). WASMANN, 1911, Tijdschr. v. Ent., LIV, p. 202; 1912, Zeitschr. Wiss. Zool., CI, pp. 104 and 106. REICHENSBERGER, 1913, Zool. Jahrb. Abt. Syst., XXXV, p. 203. FOREL, 1913, Rev. Zool. Afr., II, p. 338 (♀). BEQUAERT, *ibid.*, p. 429. FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 249 (♀, ♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 377 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 126 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 557 and 568 (♀, ♂). See p. 1036.

Type locality: Table Mountain at the Cape of Good Hope, CAPE PROVINCE (Novara Expedition).

FRENCH GUINEA: Los Islands (H. Brauns). SIERRA LEONE: (Mocquerys). BELGIAN CONGO: Elisabethville; Sankisia (J. Bequaert). MOSSAMEDES: between the Cubango and Cuito Rivers (Baum and Van der Kellen). GERMAN SOUTHWEST AFRICA: (Peters); Kubub (L. Schultze); Gobabis (Boschmann); Cape Cross to Swakopmund (Dinter). BECHUANALAND: Kooa; Khakhea to Kang (L. Schultze). CAPE PROVINCE: Port Elizabeth; Willowmore (H. Brauns); Sir Lowry Pass (F. Purcell); Cape Town; Matjesfontein (E. Simon). TRANSVAAL: Makapan (E. Simon); Pretoria (E. Simon; F. Silvestri). NATAL: Estcourt (R. C. Wroughton). DELAGOA: (Liengme). ERITREA: Asmara; Nefasit; Ghinda (K. Escherich); Keren; Sciotel (Beccari). ABYSSINIA: (Ilg); Boran Galla; Auata (V. Bottego); Adis Abeba (Kachovsky). ANGLO-EGYPTIAN SUDAN: Sebderat near Kassala (Magretti).

- 3i. Var. *anceps* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 438 (♀). See p. 215.

Type locality: BELGIAN CONGO (Kohl).

BELGIAN CONGO: Stanleyville; Medje (Lang and Chapin).

32. Var. **guineensis** MAYR, 1902, Verh. Zool. Bot. Ges. Wien, LII, p. 296 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 125 (♀). See p. 215.

Type locality: Akra, GOLD COAST (R. Buchholz).

BELGIAN CONGO: Thysville (Lang and Chapin).

33. Var. **simplicoides** (FOREL) SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 125 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 572 (♀).

✱ *Acantholepis capensis* subsp. *simplicoides* FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 86, footnote (♀).

Type locality: BASUTOLAND (R. C. Wroughton).

34. Var. **validiuscula** EMERY, 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 602 (♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 143 (♀); 1913, Rev. Zool. Afr., II, p. 338 (♀); 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 249 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 126 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 557 and 570 (♀, ♀, ♂). See p. 216.

Type locality: Webi, ABYSSINIA (Ruspoli).

BELGIAN CONGO: Sankisia (J. Bequaert); Thysville (J. Bequaert; Lang and Chapin). RHODESIA: very common (G. Arnold). CAPE PROVINCE: very common (G. Arnold); Kimberley (Power); King William's Town (R. Godfrey).

3a. Subsp. **canescens** (EMERY) REICHENSPERGER, 1913, Zool. Jahrb. Abt. Syst., XXXV, pp. 187, 189, 190, 197, 198, and 215. SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' pp. 124 and 126 (♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 378 (♀). EMERY, 1915, *ibid.*, X, p. 4 (♀). REICHENSPERGER, 1915, Ent. Mitt. Deutsch. Ent. Mus. Berlin, IV, p. 122. WASMANN, 1918, Tijdschr. v. Ent., LX, (1917), p. 397. See p. 216.

*Acantholepis capensis* var. *canescens* EMERY, 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 601 (♀); 1899, *ibid.*, XXXIX, p. 500. MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicidæ,' p. 8; 1907, Sitzb. Ak. Wiss. Wien, math. naturw. Kl., CXVI, Abt. 1, p. 389. SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 391 (♀). FOREL, 1911, Rev. Zool. Afr., I, p. 280 (♀). GESTRO, 1911, Bull. Soc. Ent. Italiana, XLI, (1909), pp. 257 and 260. STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08),' III, p. 390 (♀). KARAWAIEW, 1911, Rev. Russe Ent., XI, p. 9 (♀).

Type locality: Coromma, ABYSSINIA (Ruspoli).

SENEGAMBIA: Dakar (F. Silvestri). FRENCH GUINEA: Kindia (F. Silvestri). GOLD COAST: Aburi (F. Silvestri). SOUTHERN NIGERIA: Lagos (F. Silvestri). FRENCH CONGO: Brazzaville (A. Weiss). BELGIAN CONGO: Congo da Lemba (R. Mayné); Thysville (J. Bequaert); Avakubi (Lang and Chapin). GERMAN EAST AFRICA: Lake Mohasi (Schubotz). BRITISH EAST AFRICA: Ramisi; Blue Post Hotel, Kikuyu, 1520 m. (Alluaud and Jeannel). UGANDA: Unyoro Province, near Hoima; region of Lake Albert (C. Alluaud); Gondokoro (F. Werner). ANGLO-EGYPTIAN SUDAN: Kaka, White Nile (I. Trägårdh); Khartum (Karawaiew); near Renk; between Khartum and Fashoda. ABYSSINIA: Buditu to Dimé (V. Bottego); Diré Daua; Abuker; Bisa Timo; Gebel Hakim; Harar (Kristensen); Lake Abaja (Ruspoli). ERITREA: Ghinda; Nefasit (F. Silvestri); Sciotel, Bogos (Beccari). Saganeiti; Adi Ugri; Adi Caié (Andreini).

3a<sub>1</sub>. Var. *cacozela* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 126 (♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 378 (♀). See p. 216.

*Acantholepis capensis* var. *cacozela* STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 395 (♀).

Type locality: FRENCH CONGO.

SOUTHERN NIGERIA: Olokemeji (F. Silvestri). BELGIAN CONGO: Faradje (Lang and Chapin). FRENCH CONGO: Fort Crampel (Schubotz).

3b. Subsp. *depilis* EMERY, 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 602 (♀, ♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 126 (♀).

*Acantholepis carbonaria* EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 119 (♀, part and ♀).

Type locality: Arigalgala, SOMALILAND (Ruspoli).

ABYSSINIA: Leboi (Ruspoli).

3c. Subsp. *hirsuta* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' pp. 124 and 126, fig. 26 (♀).

Type locality: Molo, Mau Escarpment, 2420 m., BRITISH EAST AFRICA (Alluaud and Jeannel).

3c<sub>1</sub>. Var. *elevata* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 249 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 556 and 573 (♀).

Type locality: Hillside, Bulawayo, RHODESIA (G. Arnold).

3d. Subsp. *incisa* FOREL, 1913, Rev. Zool. Afr., II, p. 338 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 125, fig. 27 (♀).

Type locality: Elisabethville, BELGIAN CONGO (J. Bequaert).

BRITISH EAST AFRICA: Kijabe, Kikuyu Escarpment, 2100 m. (Alluaud and Jeannel).

3e. Subsp. *junodi* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 438 (♀). ARNOLD, 1920, Ann. South African Mus., XXIV, p. 572 (♀).

Type locality: Shilouvane, TRANSVAAL (Junod).

3f. Subsp. *lævis* (SANTSCHI).

*Acantholepis simplex* subsp. *lævis* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 378 (♀).

*Acantholepis lævis* SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 312, fig. 5 (♀).

Type locality: St. Louis, SENEGAMBIA (Claveau).

FRENCH GUINEA: Konakry (F. Silvestri).

3f<sub>1</sub>. Var. *alexis* ARNOLD, 1920, Ann. South African Mus., XIV, pp. 557 and 573 (♀).

Type Locality: Hillside, Bulawayo, RHODESIA (G. Arnold).

3g. Subsp. *simplex* FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 86, footnote. ARNOLD, 1920, Ann. South African Mus., XIV, pp. 557 and 572 (♀, ♂).

*Acantholepis simplex* FOREL, 1892, Ann. Soc. Ent. Belgique, XXXVI, p. 42 (♀); 1892, Mitth. Schweiz. Ent. Ges., VIII, p. 350 (♀, ♂). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 172. WASMANN, 1894, 'Verzeichn. Myrmecoph. Termitoph. Arthrop.,' p. 107; 1912, Zeitschr. Wiss. Zool., CI, p. 103. REICHENSPERGER, 1913, Zool. Jahrb. Abt. Syst., XXXV, p. 197. FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 143 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 123 (♀).

Type locality: SOMALILAND (C. Keller).



RHODESIA: Bulawayo (G. Arnold). BRITISH EAST AFRICA: Ramisi (Alluaud and Jeannel). UGANDA: Kadjura Swamp, near Hoima, region of Lake Albert (C. Alluaud). CAPE PROVINCE: Grahamstown (Baines and Cherry).

3*g*. Var. **minuta** (FOREL).

*Acantholepis simplex* var. *minuta* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 438 (♀).

*Acantholepis capensis* var. *minuta* ARNOLD, 1920, Ann. South African Mus., XIV, p. 572 (♀).

Type locality: Shilouvane, TRANSVAAL (Junod).

4. **Acantholepis capitata** FOREL, 1913, Rev. Zool. Afr., II, p. 338 (♀).

Type locality: Sankisia, BELGIAN CONGO (J. Bequaert).

5. **Acantholepis carbonaria** EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 119 (♀, part; *nec* ♀). FOREL, 1892, Ann. Soc. Ent. Belgique, XXXVI, p. 42 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 171. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 74. STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08),' III, p. 390 (♀). See p. 216.

Type locality: Obbia, SOMALILAND (Bricchetti-Robecchi).

SOUTHERN ABYSSINIA: (Ilg). BELGIAN CONGO: Kwidjwi Island, Lake Kivu; Mawambi to Avakubi (Schubotz); Banana (Lang and Chapin).

5*1*. Var. **erythraea** FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 265 (♀, ♀). Wasmann, 1912, Zeitschr. Wiss. Zool., CI, p. 104. EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 4 (♀).

Type locality: Nefasit, ERITREA (K. Escherich; F. Silvestri).

ERITREA: Ghinda (K. Escherich). ABYSSINIA: Harar (Ilg).

5*2*. Var. **obtusa** EMERY, 1901, Bull. Soc. Ent. Italiana, XXXIII, p. 63 (♀).

Type locality: Saati, ERITREA (Belli).

ERITREA: Sabarguma (Belli).

5*a*. Subsp. **baumi** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 449 (♀).

Type locality: MOSSAMEDES (Baum and Van der Kellen).

6. **Acantholepis crinita** MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 149 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 556 and 565 (♀).

Type locality: Port Natal, NATAL (H. Brauns).

7. **Acantholepis curta** EMERY, 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 603, fig. (♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 354 (♀).

*Acantholepis capensis* EMERY, 1881, Ann. Mus. Civ. Genova, XVI, p. 527 (♀). (*nec* Mayr).

Type locality: Assab, ERITREA (Doria).

ERITREA: Ras Doumeira (Doria). BELGIAN CONGO: Yambata (R. Mayné).

8. **Acantholepis deplanata** STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08),' III, p. 390, fig. 8 (♀).

Type locality: Buddu Forest, northwest of Bukoba, GERMAN EAST AFRICA (Schubotz).

9. **Acantholepis depressa** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 126, fig. 28 (♀).

Type locality: Ramisi River, BRITISH EAST AFRICA (Alluaud and Jeannel).

10. **Acantholepis egregia** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 143 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 557 and 574 (♀).

Type locality: Redbank, SOUTHERN RHODESIA (G. Arnold).

10a. Subsp. **santschii** ARNOLD, 1920, Ann. South African Mus., XIV, pp. 556 and 575 (♀).

Type locality: Cawston Farm, Umgusa River, SOUTHERN RHODESIA (G. Arnold).

11. **Acantholepis foreli** ARNOLD, 1920, Ann. South African Mus., XIV, pp. 556 and 564 (♀), Pl. VIII, fig. 121.

Type locality: Sipapoma, SOUTHERN RHODESIA (G. Arnold).

11<sub>1</sub>. Var. **convexa** ARNOLD, 1920, Ann. South African Mus., XIV, pp. 556 and 565 (♀).

Type locality: Hillside, Bulawayo, SOUTHERN RHODESIA (G. Arnold).

11<sub>2</sub>. Var. **impressa** ARNOLD, 1920, Ann. South African Mus., XIV, pp. 556 and 565 (♀).

Type locality: Hillside, Bulawayo, SOUTHERN RHODESIA (G. Arnold).

12. **Acantholepis gerardi** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 262 (♀).

Type locality: Kalanga, Upper Lukuga, BELGIAN CONGO (Gérard).

BELGIAN CONGO: Katakai (Gérard).

13. **Acantholepis gracilicornis** FOREL, 1892, Ann. Soc. Ent. Belgique, XXXVI, p. 42 (♀). EMERY, 1895, Ann. Soc. Ent. Belgique, XXXIX, p. 337; 1901, Bull. Soc. Ent. Italiana, XXXIII, p. 63. FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 265 (♀). KARAWAIEW, 1911, Rev. Russe Ent., XI, p. 9 (♀).

Type locality: Aden, SOUTHERN ARABIA (F. Ris).

ERITREA: Asmara (K. Escherich); Sabarguma (Belli). ANGLO-EGYPTIAN SUDAN: Port Sudan; Khartum; Assuan (Karawaiew).

13a. Subsp. **abdominalis** FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 73 (♀).

Type locality: SOUTHERN ABYSSINIA (Hg).

14. **Acantholepis longinoda** ARNOLD, 1920, Ann. South African Mus., XIV, pp. 555 and 559 (♀, ♀), Pl. VIII, figs. 120 and 120a.

Type locality: Hillside, Bulawayo, SOUTHERN RHODESIA (G. Arnold).

15. **Acantholepis nigriventris** EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 493 (♀).

Type locality: CAMEROON (Conradt).

16. **Acantholepis rubrovaria** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 142. ARNOLD, 1920, Ann. South African Mus., XIV, pp. 556 and 562 (♀, ♂).

*Acantholepis simplex* var. **rubrovaria** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 449 (♀).

Type locality: BASUTOLAND (R. C. Wroughton).

16a. Subsp. **pilosa** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 141 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 556 and 562 (♀).

Type locality: Redbank, SOUTHERN RHODESIA (G. Arnold).

16a<sub>1</sub>. Var. **avunculus** ARNOLD, 1920, Ann. South African Mus., XIV, pp. 556 and 563 (♀).

Type locality: Sawmills, Umgusa River, SOUTHERN RHODESIA (G. Arnold).

17. **Acantholepis silvicola** ARNOLD, 1920, Ann. South African Mus., XIV, pp. 556 and 576, fig. 57 (♀, ♀, ♂).

Type locality: Amatongas Forest, PORTUGUESE EAST AFRICA (G. Arnold).

18. **Acantholepis spinosior** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 144 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, pp. 556 and 557 (♀, ♀).

Type locality: Bulawayo, SOUTHERN RHODESIA (G. Arnold).

18<sub>1</sub>. Var. **ballaensis** ARNOLD, 1920, Ann. South African Mus., XIV, pp. 556 and 558 (♀).

Type locality: Balla-Balla, SOUTHERN RHODESIA (G. Arnold).

18<sub>2</sub>. Var. **natalensis** ARNOLD, 1920, Ann. South African Mus., XIV, pp. 556 and 559 (♀).

Type locality: Pietermaritzburg, NATAL (C. Akerman).

19. **Acantholepis submetallica** ARNOLD, 1920, Ann. South African Mus., XIV, pp. 556 and 566 (♀, ♀, ♂).

Type locality: Bulawayo, SOUTHERN RHODESIA (G. Arnold).

19<sub>1</sub>. Var. **aspera** ARNOLD, 1920, Ann. South African Mus., XIV, pp. 556 and 568 (♀).

Type locality: Amatongas Forest, PORTUGUESE EAST AFRICA (G. Arnold).

20. **Acantholepis vestita** (F. SMITH) DIXEY and LONGSTAFF, 1907, Trans. Ent. Soc. London, pp. 333, 336, and 365.

*Formica vestita* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 32 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 214.

Type locality: Port Natal, NATAL.

NATAL: Colenso; Newcastle (Dixey and Longstaff). CAPE PROVINCE: Stormberg Junction; Shanks Station (Dixey and Longstaff).

### Myrmelachistini Forel

#### Aphomomyrmex EMERY

*Aphomomyrmex* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 493.

Genotype: *Aphomomyrmex afer* Emery, 1899.

1. **Aphomomyrmex afer** EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 494, fig. (♀, ♀). FOREL, 1910, *ibid.*, LIV, p. 449 (♀); in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 25 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 553 (♀).

Type locality: CAMEROON (Conradt; v. Muralt).

West Africa: (Fülleborn).

2. **Aphomomyrmex muralti** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 449 (♀). ARNOLD, 1920, Ann. South African Mus., XIV, p. 553 (♀).

Type locality: NATAL (L. v. Muralt).

### Prenolepidini Forel

#### Prenolepis MAYR

*Prenolepis* MAYR, 1861, 'Europ. Formicid.,' p. 52.

*Paratrechina* MOTSCHOUJSKY, 1863, Bull. Soc. Natural. Moscou, XXXVI, 3, p. 13:

*Formica* (part) LATREILLE *et auctor.* *Lasius* MAYR. *Tapinoma* F. SMITH, MAYR, etc.

Genotype: *Formica imparis* Say, 1836.

#### Subgenus 1. **Prenolepis** MAYR, *sensu stricto*

Subgenotype: same as genotype.

1. **Prenolepis kohli** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 438 (♀, ♀?).

Type locality: St. Gabriel, BELGIAN CONGO (Kohl).

Subgenus 2. **Nylanderia** EMERY

*Prenolepis* subg. *Nylanderia* EMERY, 1906, Ann. Soc. Ent. Belgique, L, p. 134.

Subgenotype: *Formica vividula* Nylander, 1846.

2. **Prenolepis (Nylanderia) albipes** EMERY.

*Prenolepis albipes* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 497 (♀).

Type locality: CAMEROON (Conradt).

3. **Prenolepis (Nylanderia) bourbonica** FOREL. See p. 1037.

*Prenolepis nodifera* subsp. *bourbonica* FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 210 (♀, ♂).

*Prenolepis bourbonica* FOREL, in Grandidier, 1891, 'Hist. Phys. Nat. Madagascar,' XX, 2, p. 82 (♀, ♀, ♂), Pl. III, fig. 2; in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 87 (♀).

Type locality: RÉUNION.

BRITISH EAST AFRICA: Chake-Chake, Pemba Island (Voeltzkow).

4. **Prenolepis (Nylanderia) grisoni** FOREL, 1914, Rev. Suisse Zool., XXIV, p. 440, fig. 5 (♀).

Type locality: Bengamisa, BELGIAN CONGO (Kohl).

5. **Prenolepis (Nylanderia) incallida** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 263, fig. 12 (♀).

Type locality: SAN THOMÉ Island.

6. **Prenolepis (Nylanderia) jägerskiöldi** MAYR.

*Prenolepis jägerskiöldi* MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicid.,' p. 8 (♀). EMERY, 1906, Ann. Soc. Ent. Belgique, L, p. 130. KARAWAIEW, 1911, Rev. Russe Ent., XI, p. 9, fig. 3 (♀, ♀, ♂).

*Prenolepis (Nylanderia) jägerskiöldi* EMERY, 1910, Deutsch. Ent. Zeitschr., pp. 127 and 130, figs. 4 and 5 (♀, ♀, ♂).

*Prenolepis vividula* ERN. ANDRÉ, 1881, Ann. Soc. Ent. France, (6) I, p. 61 (♀, ♀, ♂); 1882, 'Spec. Hym. Europ. Algérie,' II, pp. 204 and 206 (♀, ♀, ♂), Pl. x, figs. 8-10 and 12 (*ex typ.*). FOREL, in Grandidier, 1891, 'Hist. Phys. Nat. Madagascar,' XX, 2, p. 88 (♂), Pl. II, fig. 1 (*ex typ.*) (*nec vividula* Nylander).

*Prenolepis jägerskiöldi* var. *borcardi* SANTSCHI, 1908, Ann. Soc. Ent. France, LXXVII, p. 533, fig. 12 (♀, ♀, ♂).

*Prenolepis (Nylanderia) jägerskiöldi* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 128 (♀).

Type locality: Cairo, EGYPT (Jägerskiöld; Karawaiew; Borcard).

EGYPT, CYPRUS, SYRIA: GERMAN EAST AFRICA: Tanga (Alluaud and Jeannel).

7. **Prenolepis (Nylanderia) lepida** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 262, fig. 11 (♀).

Type locality: Victoria, CAMEROON (Reichensperger).

8. **Prenolepis (Nylanderia) longicornis** (LATREILLE) SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 127 (♀). LAMBORN, 1920, Trans. Ent. Soc. London, (1919), Proc., p. lvi. See pp. 217 and 1038.

*Formica longicornis* LATREILLE, 1802, 'Hist. Nat. Fourmis,' p. 113 (♀). F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 31. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 417.

*Formica vagans* JERDON, 1851, Madras Journ. Litt. Sc., XVII, p. 124 (♀, ♀); 1854, Ann. Mag. Nat. Hist., (2) XIII, p. 107 (♀, ♀).

*Formica (Tapinoma) gracilescens* NYLANDER, 1856, Ann. Sc. Nat. Zool., (4) V, p. 73 (♀), Pl. III, fig. 20.

*Formica gracilescens* NYLANDER, 1856, Ann. Soc. Ent. France, (3) IV, Bull., p. xxviii (♀).

*Tapinoma gracilescens* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 56. WHITE, 1883, 'Ants and Their Ways,' p. 257 (♀). FOWLER, 1885, Ent. Monthly Mag., XXII, p. 276.

*Prenolepis gracilescens* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 698.

*Paratrechina currens* MOTSCHOUJSKY, 1863, Bull. Soc. Nat. Moscou, XXXVI, 3, p. 14.

*Prenolepis longicornis* ROGER, 1863, 'Verzeich. Formicid.,' p. 10. MAYR, 1865, 'Reise Novara, Zool.,' II, Formicidae, p. 50 (♀); 1867, Tijdschr. v. Ent., X, p. 72 (♀, ♀). FRAUENFELD, 1867, Verh. Zool. Bot. Ges. Wien, XVII, p. 442. MAYR, 1870, ibid., XX, p. 947 (♀); 1876, Journ. Mus. Godeffroy, XII, p. 77. ERN. ANDRÉ, 1881, Ann. Soc. Ent. France, (6) I, p. 60 (♀, ♂). FOREL, 1881, Mitth. München. Ent. Ver., V, p. 2. ERN. ANDRÉ, 1882, 'Spec. Hym. Europ. Algérie,' II, pp. 203, 205, and 206 (♀, ♀, ♂), Pl. x, fig. 11. EMERY, 1888, Zeitschr. Wiss. Zool., XLVI, p. 379, Pl. XXVII, fig. 5. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 179. FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 54 (♀); 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 266 (♀). KARAWAIEW, 1911, Rev. Russe Ent., XI, p. 9 (♀). LONGSTAFF, 1911, Ent. Monthly Mag., XLVII, p. 124. FOREL, 1913, Rev. Zool. Afr., II, p. 339 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 354 (♀, ♀); 1914, Bull. Soc. Vaudoise Sc. Nat., (5) I, p. 249 (♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 378 (♀). STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 395 (♀). SANTSCHI, 1920, 'Études Maladies Parasites Cacaoyer S. Thomé,' X, p. 3 (♀).

*Prenolepis longicornis* var. *hagemanni* FOREL, 1901, Mitt. Naturh. Mus. Hamburg, XVIII, p. 65 (♀); 1907, ibid., XXIV, p. 15; 1916, Rev. Suisse Zool., XXIV, p. 441 (♀).

Type locality: Senegal.

Tropicopolitan. WEST AFRICA: (Jourdan). FRENCH GUINEA: Konakry; Kakoulima (F. Silvestri). SOUTHERN NIGERIA: Lagos (F. Silvestri). SAN THOMÉ: (de Seabra). FRENCH CONGO: Fort de Possel to Fort Crampel (Schubotz). BELGIAN CONGO: Boma (C. Hagemann; Styczinski); Congo da Lemba (R. Mayné); Leopoldville; Kwamouth (J. Maes); St. Gabriel (Kohl); Zambi; Stanleyville (Lang and Chapin); Libenge (Schubotz). ANGLO-EGYPTIAN SUDAN: Khartum (Karawaiew). GERMAN EAST AFRICA: Tanga (Alluaud and Jeannel); Lindi (Lamborn); Nguela, Usambara. NATAL: Durban (G. Arnold; C. B. Cooper).

#### 9. *Prenolepis (Nylanderia) trægaordhi* FOREL.

*Prenolepis trægaordhi* FOREL, in Wasmann, 1904, 'Termitophilen aus dem Sudan, Res. Swed. Zool. Exped. Jägerskiöld,' XIII, p. 14 (♀, ♂).

Type locality: Kaka, White Nile, ANGLO-EGYPTIAN SUDAN (I. Trägårdh).

91. Var. *natalensis* FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 348 (♀).

Type locality: Durban, NATAL (G. Arnold).

10. *Prenolepis (Nylanderia) vividula* (NYLANDER) EMERY, 1906, Ann. Soc. Ent. Belgique, L, p. 134, figs. 1-4 (♀, ♀, ♂). See p. 218.

*Formica vividula* NYLANDER, 1847, Acta Soc. Sc. Fennicæ, II, 2, p. 900 (♀, ♀, ♂), Pl. XVIII, figs. 2 and 10-14.

*Prenolepis vividula* MAYR, 1861, 'Europ. Formicid.,' p. 52; 1870, Verh. Zool. Bot. Ges. Wien, XX, pp. 948 and 949 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 180.

Type locality: in the hothouses of the Botanical Garden at Helsingfors, FINLAND (Nylander).

Tropicopolitan. BELGIAN CONGO: Niapu (Lang and Chapin).

11. ***Prenolepis (Nylanderia) waelbroeckii*** EMERY.

*Prenolepis waelbroeckii* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 496, fig. (♀, ♂).

*Prenolepis waelbroeckii* FOREL, 1909, *ibid.*, LIII, p. 54 (♂); 1911, Rev. Zool. Afr., I, p. 280 (♀?).

Type locality: Kinshasa, BELGIAN CONGO (Waelbroeck).

BELGIAN CONGO: Congo da Lemba (R. Mayné).

12. ***Prenolepis (Nylanderia) weissii*** SANTSCHI, 1911, Rev. Zool. Afr., I, p. 210 (♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

13. ***Prenolepis (Nylanderia) zelotypa*** SANTSCHI.

*Prenolepis (Nylanderia) jagerskioldi* var. *zelotypa* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 264 (♀).

*Prenolepis zelotypa* SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 238.

Type locality: BRITISH EAST AFRICA.

RHODESIA: Victoria Falls (G. Arnold).

### Formicini Forel<sup>1</sup>

#### ***Pseudolasius*** EMERY

*Pseudolasius* EMERY, 1887, Ann. Mus. Civ. Genova, XXIV, p. 244.

*Formica* (part) F. SMITH. *Lasius* (part) MAYR.

Genotype: *Formica familiaris* F. Smith, 1860.

1. ***Pseudolasius bucculentus*** WM. M. WHEELER. See p. 222 (♀, ♂).

Type locality: Medje, BELGIAN CONGO (Lang and Chapin).

2. ***Pseudolasius bufonum*** WM. M. WHEELER. See p. 220 (♀, ♀, ♂).

Type locality: Medje, BELGIAN CONGO (Lang and Chapin).

3. ***Pseudolasius gowdeyi*** WM. M. WHEELER. See p. 223 (♀).

*Acropyga gowdeyi* GOWDEY, 1917, Bull. Ent. Research, VIII, pt. 2, p. 187 (without description).

Type locality: Entebbe, UGANDA (C. C. Gowdey).

4. ***Pseudolasius weissii*** SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 391, fig. 16 (♀, ♀). EMERY, 1911, Ann. Soc. Ent. Belgique, LV, pp. 214 and 219 (♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

4<sub>1</sub>. Var. ***sordidus*** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 378 (♀). See p. 219.

Type locality: Aburi, GOLD COAST (F. Silvestri).

BELGIAN CONGO: Akenge (Lang and Chapin).

<sup>1</sup>Bingham, 1903, Ann. Mag. Nat. Hist., (7) XII, p. 62, records *Formica rufibarbis* Fabricius (♂, ♀) as taken by Distant at Pretoria, Transvaal. It would be interesting to know whether this Palearctic ant has really been introduced into South Africa.

**Cataglyphis FÖRSTER**

*Cataglyphis* FÖRSTER, 1850, Verh. Naturh. Ver. Preuss. Rheinl., VII, p. 493.

*Monocombus* MAYR, 1855, Verh. Zool. Bot. Ges. Wien, V, p. 381.

*Formica* (part) FABRICIUS, etc. *Tapinoma* F. SMITH. *Myrmecocystus* EMERY, FOREL, MACCOCK, ERN. ANDRÉ, etc.

Genotype: *Formica megalocola* Förster, ♀, 1850 = *Cataglyphis fairmairei* Förster, ♂, 1850.

1. ***Cataglyphis cursor*** (BOYER DE FONSCOLOMBE) MAYR, 1861, 'Europ. Formicid.,' p. 45 (♀, ♀, ♂).

*Formica cursor* BOYER DE FONSCOLOMBE, 1846, Ann. Soc. Ent. France, (2) IV, p. 41 (♀, ♀, ♂); *ibid.*, Bull., p. lxxix (♀).

*Myrmecocystus cursor* EMERY, 1898, Öfvers. Finsk. Vet.-Soc. Förh., XL, p. 147, footnote (♀).

Type locality: Aix, FRANCE (Boyer de Fonscolombe).

SOUTHERN EUROPE, ANATOLIA, and CENTRAL ASIA. Emery (*loc. cit.*) records it from the GOLD COAST.

2. ***Cataglyphis viaticus*** (FABRICIUS) MAYR, 1861, 'Europ. Formicid.,' p. 45 (♀, ♀, ♂). RADOSZKOWSKY, 1876, Hor. Soc. Ent. Rossicæ, XII, p. 140. EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 366 (♀, ♀).

*Formica viatica* FABRICIUS, 1787, 'Mantissa Insect.,' I, p. 308 (♀).

*Myrmecocystus viaticus* EMERY, 1880, Ann. Mus. Civ. Genova, XV, p. 389 (♀). MAGRETTI, 1884, *ibid.*, XXI, p. 537 (♀). FOREL, 1894, Journ. Bombay Nat. Hist. Soc., VIII, p. 402.

Type locality: SPAIN (Vahl).

EASTERN EUROPE, NORTH AFRICA, WESTERN and CENTRAL ASIA, NORTHERN INDIA. EGYPT. ABYSSINIA: Harar (Ilg). ANGLO-EGYPTIAN SUDAN: Sebderat; Kassala (Magretti). ERITREA: Keren; Sciotel; Anseba (Beccari); Sogodas (Magretti).

2a. Subsp. ***abyssinicus*** (FOREL).

*Myrmecocystus viaticus* subsp. *abyssinicus* FOREL, 1904, Ann. Mus. Zool. Ac. Sc. St. Pétersbourg, VIII, (1903), p. 382 (♀, ♀).

Type locality: Ingfal, ABYSSINIA (Kachovskij).

ABYSSINIA: Schoa; western Abyssinia (Ilg).

2b. Subsp. ***adenensis*** (FOREL).

*Myrmecocystus viaticus* subsp. *adenensis* FOREL, 1904, Ann. Mus. Zool. Ac. Sc. St. Pétersbourg, VIII, (1903), p. 382, footnote (♀).

Type locality: Aden, southern ARABIA (F. Ris).

2c. Subsp. ***bicolor*** (FABRICIUS).

*Formica bicolor* FABRICIUS, 1793, 'Ent. Syst.,' II, p. 351 (♂). LATREILLE, 1802, 'Hist. Nat. Fourmis,' p. 173 (♂). FABRICIUS, 1804, 'Syst. Piez.,' p. 398 (♂).

*Myrmecocystus viaticus* var. *desertorum* FOREL, 1894, Journ. Bombay Nat. Hist. Soc., VIII, p. 402 (♀); 1894, Mitth. Schweiz. Ent. Ges., IX, p. 72. EMERY, 1895, Ann. Mus. Civ. Genova, XXXV, p. 180.

*Myrmecocystus viaticus* subsp. *desertorum* K. ESCHERICH, 1902, Allgem. Zeitschr. Ent., VII, p. 354. MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicid.,' p. 10.

*Myrmecocystus bicolor* MAYR, 1907, Sitzb. Ak. Wiss. Wien, math. naturw. Kl., CXVI, Abt. 1, p. 389.

*Myrmecocystus viaticus* subsp. *bicolor* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 450.

*Cataglyphis bicolor* EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 22 (♀, ♂).

Type locality: BARBARY (Desfontaines).

ALGERIAN SAHARA. EGYPT. ANGLO-EGYPTIAN SUDAN: Edeloud in the Kordofan Desert (F. Werner); Gebelein (I. Trägårdh). ERITREA: Mayabal; Nefasit (F. Silvestri). ABYSSINIA: southern Abyssinia (Ilg); Ogaden (V. Bottego). SOMALILAND: wells of Laffarugh to wells of Aberio (V. Bottego). GOLD COAST (doubtful record).

2a. Var. *congolensis* (STITZ).

*Myrmecocystus bicolor* var. *congolensis* STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 396, fig. 10 (♀).

Type locality: Fort Archambault, FRENCH CONGO (Schubotz).

2d. Subsp. *setipes* (FOREL).

*Myrmecocystus viaticus* subsp. *setipes* FOREL, 1894, Journ. Bombay Nat. Hist. Soc., VIII, p. 401 (♀).

Type locality: NUSSEERABAD, INDIA (Gladson).

2d. Var. *seticornis* (EMERY).

*Myrmecocystus viaticus* subsp. *setipes* var. *seticornis* EMERY, 1898, Öfvers. Finsk. Vet. Soc. Förh., XL, p. 147, footnote (♀).

Type locality: GOLD COAST.

### **Ecophyllini Forel**

#### **Ecophylla F. SMITH**

*Ecophylla* F. SMITH, 1861, Journ. Proc. Linn. Soc. London, Zool., V, p. 101.

*Formica* (part) FABRICIUS, et auct. *Myrmica* (part) HEER.

Genotype: *Formica smaragdina* Fabricius, 1775.

1. ***Ecophylla longinoda*** (LATREILLE) GERSTÄCKER, 1871, Arch. f. Naturg., XXXVII, 1, p. 354; 1873, in 'v. d. Decken's Reisen in Ost Afrika, Gliederthiere,' p. 343 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 176. H. KOHL, 1906, Natur u. Offenbarung, LII, pp. 166-167; 1909, ibid., LV, p. 169. WASMANN, 1911, 1<sup>er</sup> Congr. Intern. Entom. Bruxelles (1910), II, Mém., p. 231; 1913, Ann. Rept. Smiths. Inst. for 1912, p. 472. FOREL, 1913, Rev. Zool. Afr., II, p. 339 (♀). See p. 227.

*Formica longinoda* LATREILLE, 1802, 'Hist. Nat. Fourmis,' p. 184 (♀), Pl. XI, fig. 72.

*Echophylla virescens* RADOSZKOWSKY, 1881, Journ. Sci. Ac. Lisboa, VIII, No. 31, p. 197.

*Ecophylla brevinodis* ERN. ANDRÉ, 1890, Rev. d'Ent. Caen, IX, p. 313 (♀). STITZ, 1913, Mitt. Zool. Mus. Berlin, V, p. 148 (♀). SANTSCHI, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 345 (♀, ♀).

*Ecophylla smaragdina* subsp. *longinoda* EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), p. 564 (♀, ♀). FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 72. ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 2 (♀, ♀). MAYR, 1896, Ent. Tidskr., XVII, p. 249. FOREL, 1897, Abhandl. Senckenberg. Naturf. Ges., XXI, p. 188 (♀). H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 39. EMERY, 1899, Ann. Mus. Civ. Genova, XXXIX, p. 500 (♀, ♀). MAYR, in Sjöstedt, 1907, 'Exped. Kili-



mandjaro, Meru, etc., II, 8, p. 18. FOREL, 1907, Mitt. Naturh. Mus. Hamburg, XXIV, p. 15 (♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 391. FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, pp. 54 (♀, ♀), 61 (♀), and 73 (♀, ♀); in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 25 (♀). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 148 (♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 354 (♀, ♂). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 378 (♀). LAMBORN, 1914, Trans. Ent. Soc. London, (1913), p. 444. STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 396 (♀).

*Ecophylla longinoda* var. *brevinodis* DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 176.

*Ecophylla smaragdina* var. *longinoda* L. REH, 1905, Zeitschr. f. Pflanzenkrankh., XV, p. 135. AULMANN and LA BAUME, 1912, 'Fauna d. Deutsch. Kolon.,' V, 3, p. 65, fig. 37. AULMANN, 1913, *ibid.*, V, 5, p. 95, fig. 80. FOREL, 1913, Rev. Suisse Zool., XXI, p. 670 (♀, ♂).

*Ecophylla smaragdina* subsp. *longinoda* var. *brevinoda* SANTSCHI, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 345 (♀, ♀).

*Ecophylla smaragdina* subsp. *brevinodis* STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 396 (♀).

Type locality: Senegal.

SÉNÉGAMBIA: Dakar (F. Silvestri). GAMBIA: Bathurst (C. Alluaud). FRENCH GUINEA: Kindia (F. Silvestri). SIERRA LEONE: (Mocquerys). LIBERIA. IVORY COAST: Grand Bassam (Lohier; Bonet); Assinie (C. Alluaud). GOLD COAST. SLAVE COAST. SOUTHERN NIGERIA: Oni Camp, east of Lagos (Lamborn). CAMEROON: (Sjöstedt; Conradt); Bibundi (Tessmann); Molundu (Reichensperger); Victoria (Winkler). SPANISH GUINEA: Alen (Tessmann). FRENCH CONGO: Ogowé (Mocquerys); Brazzaville; Madingu (A. Weiss); Fort Crampel (Schubotz); Boda. BELGIAN CONGO: Duma (Schubotz); Kondué; Sankuru (Luja); Mondombe (R. Mayné); Leopoldville to Stanleyville (Weyns); Mayombe (de Briey); Banana (Buschodts); Kinshasa (Waelbroeck); Malela; Faradje (Lang and Chapin); Katala (J. Bequaert); Boma. ANGOLA: (Welwitsch); San Antonio (Lang and Chapin). GERMAN EAST AFRICA: Tanga (Sjöstedt). BRITISH EAST AFRICA: Mombasa (v. d. Decken). ZANZIBAR: (Stuhlmann; Voeltzkow). PORTUGUESE EAST AFRICA: Delagoa (Liengme). ABYSSINIA: Buditu to Dimé; Dimé to Bass Narok (V. Bottego).

1. Var. **annectens** Wm. M. WHEELER. See p. 230 (♀, ♀, ♂).

Type locality: Avakubi, BELGIAN CONGO (Lang and Chapin).

BELGIAN CONGO: Stanleyville; Niangara (Lang and Chapin); Malela (J. Bequaert).

12. Var. **fusca** (EMERY). See p. 231.

*Ecophylla fusca* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 496 (♀, ♀). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 148 (♀); 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 396 (♀).

*Ecophylla smaragdina* subsp. *fusca* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 354.

Type locality: CAMEROON (Conradt).

LIBERIA: Monrovia (J. Morris). NIGERIA. SPANISH GUINEA: Alen (Tessmann). BELGIAN CONGO: Stanleyville; Garamba (Lang and Chapin); Duma (Schubotz).

13. Var. **rubriceps** (FOREL). See p. 231.

*Ecophylla smaragdina* subsp. *fusca* var. *rubriceps* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 354 (♀).

Type locality: BELGIAN CONGO.

BELGIAN CONGO: Stanleyville (Lang and Chapin).

14. Var. **textor** (SANTSCHI).

*Ecophylla smaragdina* subsp. *longinoda* var. *textor* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 128, fig. 29a (♂, ♀).

Type locality: Mangapwani, ZANZIBAR ISLAND (Alluaud and Jeannel).

ZANZIBAR ISLAND: Bububu (Alluaud and Jeannel). BRITISH EAST AFRICA: Likoni; Cheteni; Tiwi; Gazi near Mombasa (Alluaud and Jeannel).

2. **Ecophylla smaragdina** (FABRICIUS) F. SMITH, 1861, Journ. Proc. Linn. Soc. London, Zool., V, p. 102 (♂). MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 695; 1863, *ibid.*, XIII, p. 438; 1867, Tijdschr. v. Ent., X, p. 70 (♂, ♀). FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 199 (♂). EMERY, 1887, Ann. Mus. Civ. Genova, XXIV, p. 242 (♂, ♀); 1888, Zeitschr. Wiss. Zool., XLVI, p. 379, Pl. xxvii, fig. 7. ROTHNEY, 1889, Trans. Ent. Soc. London, p. 358. EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), p. 564 (♂, ♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 177. MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 197. H. STADELMANN, 1893, Mitth. Deutsch. Schutzgeb., VI, p. 217. EMERY, 1894, Mem. Accad. Sc. Bologna, (5) IV, p. 112 (♂, ♀). BINGHAM, 1903, 'Fauna Brit. India, Hym.,' II, p. 311, fig. 93 (♂, ♀, ♂); 1903, Ann. Mag. Nat. Hist., (7) XII, p. 62 (♂). FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 88 (♂); 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 371; 1913, Rev. Zool. Afr., II, p. 339 (♂). BEQUAERT, *ibid.*, p. 430. CARPENTER, 1920, 'A Naturalist on Lake Victoria,' pp. 100 and 283.

*Formica smaragdina* FABRICIUS, 1775, 'Syst. Ent.,' p. 828 (♀); 1781, 'Spec. Insect.,' I, p. 488 (♀); 1787, 'Mantissa Insect.,' I, p. 307. GMELIN, in Linnaeus, 1790, 'Syst. Nat.,' Ed. 13, I, 5, p. 2797. CHRIST, 1791, 'Naturg. d. Insect.,' p. 505, Pl. LX, fig. 1. OLIVIER, 1791, 'Encycl. Méthod. Insect.,' VI, p. 491. FABRICIUS, 1793, 'Ent. Syst.,' II, p. 350 (♀). LATREILLE, 1802, 'Hist. Nat. Fourmis,' p. 176 (♀), Pl. III, fig. 18. FABRICIUS, 1804, 'Syst. Piez.,' p. 397. LEPELETIER, 1836, 'Hist. Nat. Ins. Hym.,' I, p. 218. JERDON, 1851, Madras Journ. Litt. Sc., XVII, p. 121 (♂, ♀, ♂); 1854, Ann. Mag. Nat. Hist., (2) XIII, p. 104 (♂, ♀, ♂). F. SMITH, 1857, Journ. Proc. Linn. Soc. London, Zool., II, p. 53; 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 17, Pl. III, fig. 3. TENNENT, 1861, 'Sketch Nat. Hist. Ceylon,' p. 422.

*Formica macra* GUÉRIN, in Duperrey, 1830, 'Voy. Coquille, Zool.,' II, 2, p. 202 (♂); Atlas, Ins., Pl. VIII, fig. 1.

*Formica zonata* GUÉRIN, *ibid.*, p. 205 (♀).

*Ecophylla smaragdina* var. *longinoda* EMERY, 1887, Ann. Mus. Civ. Genova, XXIV, p. 243 (*nec* Latreille).

Type locality: INDIA.

Indomalayan and Papuan Regions.

The occurrence of this species in the Ethiopian Region is doubtful. It was recorded from the following African localities, but the specimens in question may have been *longinoda*:

BELGIAN CONGO: Bukama (J. Bequaert). BRITISH EAST AFRICA: Mombasa (H. Prell); Pemba Island (Burt). GERMAN EAST AFRICA: Mafia Island (Voeltzkow); Amani; Ulenge (Zimmer). ZANZIBAR: (Stuhlmann). PORTUGUESE EAST AFRICA: Inhambane; Magnarra River (Fornasini). UGANDA: Ngamba Island, Victoria Nyanza (Carpenter).

**Camponotini Forel****Camponotus MAYR<sup>1</sup>**

*Camponotus* MAYR, 1861, 'Europ. Formicid.,' p. 35.

*Formica* (part) LINNÆUS, etc.

Genotype: *Formica herculeana* LINNÆUS, 1758.

**Subgenus 1. Myrmoturba FOREL**

*Camponotus* subg. *Myrmoturba* FOREL, 1912, Mém. Soc. Ent. Belgique, XX, p. 91; 1914, Rev. Suisse Zool., XXII, p. 259. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 235.

Subgenotype: *Formica maculata* Fabricius, 1781.

**1. Camponotus (Myrmoturba) acwapimensis MAYR.**

*Camponotus acwapimensis* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 664 (♀); 1863, ibid., XIII, p. 397. ROGER, 1863, 'Verzeich. Formicid.,' p. 2. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 220. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 150; in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 20 (♀). See p. 236.

*Camponotus acwapimensis* EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 365 (♀); 1897, ibid., XXXVIII, p. 604; 1896, Mem. Accad. Sc. Bologna, (5) V, p. 770.

*Camponotus aquapimensis* EMERY, 1899, Ann. Mus. Civ. Genova, XXXIX, p. 501.

*Camponotus akwapimensis* L. REH, 1905, Zeitschr. f. Pflanzenkrankh., XV, p. 134.

*Camponotus akwapimensis* EMERY, 1901, Bull. Soc. Ent. Italiana, XXXIII, p. 63. FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 90 (♀, ♀); 1907, Ann. Mus. Nat. Hungarici, V, p. 31 (♀); 1907, Mitt. Naturh. Mus. Hamburg, XXIV, p. 16 (♀); 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 268 (♀); 1910, Ann. Soc. Ent. Belgique, LIV, p. 451 (♀); 1911, Rev. Zool. Afr., I, p. 281 (♀); 1911, Bull. Soc. Vaudoise Sc. Nat., (5) LXVII, p. 371 (♀). AULMANN and LA BAUME, 1912, 'Fauna d. Deutsch. Kolon.,' V, 3, p. 65. AULMANN, 1913, ibid., V, 5, p. 95. BEQUAERT, 1913, Rev. Zool. Afr., II, p. 430. FARQUHARSON, 1914, Trans. Ent. Soc. London, Proc., p. xxiv.

*Camponotus (Myrmoturba) akwapimensis* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, pp. 145 and 355 (♀, ♀); 1913, Rev. Zool. Afr., II, p. 340 (♀, ♀, ♂); 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 253 (♀, ♂).

*Camponotus (Myrmoturba) acwapimensis* FOREL, 1914, Revue Suisse Zool., XXII, p. 266. SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 380 (♀). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 442 (♀, ♀).

*Camponotus mombassæ* FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 180 (♀). EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 119 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 243. EMERY, 1895, Ann. Mus. Civ. Genova, XXXV, p. 181. H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 37.

*Camponotus kersteni* subsp. *mombassæ* EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 770.

<sup>1</sup>*Camponotus angolensis* "Smith," recorded from Angola (Welwitsch) by Radoszkowsky, 1881, Journ. Sci. Ac. Lisboa, VIII, No. 31, p. 197, has apparently never been described. Dixey and Longstaff, 1907, Trans. Ent. Soc. London, p. 336, mention *Camponotus marginatus* (Latreille) as taken by them at Johannesburg, Transvaal; but this record is probably due to misidentification, since this is a holarctic species.

*Camponotus (Myrmoturba) ackwapimensis* EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 255.

Type locality: Akwapim Mountains, GOLD COAST.

FRENCH GUINEA: Kindia; Camayenne; Mamou (F. Silvestri); Los Islands. SIERRA LEONE. LIBERIA: Grand Bassa; Junk River (H. Brauns). SOUTHERN NIGERIA: Moor Plantation near Ibadan (Farquharson); Old Calabar (H. Brauns). CAMEROON: (H. Brauns); Victoria (Fickendey). BELGIAN CONGO: Banza Masola; Ganda Sundi; Mondombe; Congo da Lemba (R. Mayné); Yumbi; Zambi (J. Bequaert); Faradje; Garamba; Bolengi near Coquilhatville; Stanleyville; Vankerekhovenville; Akenge; Niangara (Lang and Chapin); Thysville (Lang, Chapin, and J. Bequaert); Eala. RHODESIA: Bulawayo (G. Arnold). GERMAN EAST AFRICA: Kigerama; Mombasa (Hildebrandt; H. Prell); Tanga (Zimmer); Mto-ya-Kifaru (Katona); Kilimanjaro (Sjöstedt); Patta; Manda. UGANDA: Chacansengula (Bayer). BRITISH EAST AFRICA: Fundu Island, W. Pemba (Voeltzkow). SOMALILAND: Lower Ganada (V. Bottego); Giari Bulé (Ruspcli); between Obbia and Berbera (Bricchetti-Robecchi). ABYSSINIA: Arussi Galla, Ganale Gudda; Dimé to Bass Narok (V. Bottego); Bela; Coromma (Ruspcli); western Abyssinia (Ilg). ERITREA: Keren (Beccari); Asmara; Keren (Mancini and Ruggeri).

1. Var. **poultoni** (FOREL).

*Camponotus akwapimensis* var. *poultoni* FOREL, 1913, Rev. Zool. Afr., II, p. 353 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 355 (♀). LAMBORN, 1914, Trans. Ent. Soc. London, (1913), p. 444. FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 348 (♀, ♂).

*Camponotus (Myrmoturba) akwapimensis* var. *poultoni* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 380 (♀).

*Camponotus (Myrmoturba) akwapimensis* var. *poultoni* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 442 (♀).

Type locality: Lagos, SOUTHERN NIGERIA (Lamborn).

SIERRA LEONE. CAMEROON: Victoria (F. Silvestri). BELGIAN CONGO: St. Gabriel (Kohl); Congo da Lemba (R. Mayné).

2. **Camponotus (Myrmoturba) arnoldinus** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 251 (♀).

Type locality: Durban, NATAL (G. Arnold).

3. **Camponotus (Myrmoturba) belligerum** SANTSCHI.

*Camponotus belligerum* SANTSCHI, 1920, Ann. Soc. Ent. France, LXXXVIII, (1919), p. 384, fig. 15 (♀).

Type locality: Ababis, GERMAN SOUTHWEST AFRICA (G. Arnold).

4. **Camponotus (Myrmoturba) bianconii** EMERY. FOREL, 1914, Rev. Suisse Zool., XXII, p. 267. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 255.

*Camponotus bianconii* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 52 (♀); 1896, Mem. Accad. Sc. Bologna, (5) V, p. 771.

Type locality: Cape Town, CAPE PROVINCE (E. Simon).

5. **Camponotus (Myrmoturba) cleobulus** SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 238 (♀).

Type locality: Drakensberg, NATAL, 11,000 ft. (Haviland).

6. **Camponotus (Myrmoturba) maculatus** (FABRICIUS). FOREL, 1914, Rev. Suisse Zool., XXII, p. 267. DONISTHORPE, 1915, Ent. Record, XXVII, p. 221 (♂). EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 255. See pp. 234 and 1040.

*Formica maculata* FABRICIUS, 1781, 'Spec. Ins.,' I, p. 491 (♀); 1787, 'Mantissa Insect.,' I, p. 308 (♀). GMELIN, in LINNÆUS, 1790, 'Syst. Nat.,' Ed. 13, I, 5, p. 2800. OLIVIER, 1791, 'Encycl. Méthod. Insect.,' VI, p. 495. FABRICIUS, 1793, 'Ent. Syst.,' II, p. 356 (♀). LATREILLE, 1802, 'Hist. Nat. Fourmis,' p. 283. FABRICIUS, 1804, 'Syst. Piez.,' p. 403 (♀). LEPELETIER, 1836, 'Hist. Nat. Ins. Hym.,' I, p. 215 (♀). F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 28 (♀).

*Camponotus maculatus* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 654 (♀, ♀, ♂). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 241. EMERY, 1915, Bull. Soc. Ent. France, p. 79.

*Camponotus maculatus maculatus* EMERY, 1905, Rend. Accad. Sc. Bologna, (1904-05), p. 37; 1908, Deutsch. Ent. Zeitschr., pp. 190 and 191 (♂, ♀, ♀, ♂).

Type locality: "in Africa æquinoctiali" (probably SIERRA LEONE).

BELGIAN CONGO: Medje; Yakuluku; Garamba; Vankerckhovenville; Faradje (Lang and Chapin).

The distribution of the typical form cannot be traced at present. Probably one of the subspecies or varieties listed below is a synonym of it; perhaps such is the case for *C. maculatus* subsp. *melanocnemis* var. *lohieri* Santschi.

The following references of "*Camponotus maculatus*" probably include some of the forms and not the type.

*Formica maculata* GERSTÆCKER, 1858, Monatsb. Ak. Wiss. Berlin, p. 262; in Peters, 1862, 'Reise n. Mossambique, Zool.,' V, p. 509 (♀). A. GIRARD, 1881, Journ. Sci. Ac. Lisboa, VIII, No. 31, p. 227; in Capello and Ivens, 1882, 'From Benguela to the Territory of Yacca,' II, p. 294.

*Camponotus maculatus* ROGER, 1863, 'Verzeich. Formicid.,' p. 2. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 400; 1865, 'Reise Novara, Zool.,' II, Formicidæ, p. 27. GERSTÆCKER, 1871, Arch. f. Naturg., XXXVII, 1, p. 355; 1873, in 'v. d. Decken's Reisen in Ostafrika, Gliederthiere,' p. 344 (♀, ♀). EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 364 (♀, ♀, ♂). W. F. KIRBY, 1884, Ann. Mag. Nat. Hist., (5) XIII, p. 404. EMERY, 1890, Bull. Soc. Ent. Italiana, XXII, p. 56; 1892, Ann. Soc. Ent. France, LX, (1891), p. 566. FOREL, 1892, Mitth. Schweiz. Ent. Ges., VIII, p. 349 (♀). EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 119 (♀). MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 195. EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 46; 1895, Ann. Mus. Civ. Genova, XXXV, p. 180; 1896, Mem. Accad. Sc. Bologna, (5) V, p. 768 (♀, ♀); 1896, Ann. Mus. Civ. Genova, XXXVII, p. 158 (♀, ♂); 1897, ibid., XXXVIII, p. 604. H. STADELMANN, 1898, 'Deutsch Ost-Afrika,' IV, Hym., p. 36. EMERY, 1899, Ann. Mus. Civ. Genova, XXXIX, p. 501. BINGHAM, 1903, Ann. Mag. Nat. Hist., (7) XII, p. 62 (♀, ♀, ♂). MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicid.,' p. 11; 1907, Sitzb. Ak. Wiss. Wien, math. naturw. Kl., CXVI, Abt. 1, p. 389; in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 19 (♀, ♀). FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 31 (♀); 1907, Mitt. Naturh. Mus. Hamburg, XXIV, p. 16 (♀). F. F. KOHL, 1907, Denkschr. Ak. Wiss. Wien, LXXI, p. 282 (♀, ♀). DIXEY and LONGSTAFF, 1907, Trans. Ent. Soc. London, pp. 310, 320, 327, 336, 341, 363, and 369. STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 148 (♀). FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 26 (♀, ♀, ♂); 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 266 (♀). STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08),' III, p. 392 (♀). FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 371 (♀); 1913, Rev. Zool. Afr., II, p. 340 (♀). REICHENSPERGER, 1913, Zool. Jahrb. Abt. Syst., XXXV, pp. 198 and 215.

*Camponotus sylvaticus* subsp. *maculatus* FOREL, 1879, Bull. Soc. Vaudoise Sc. Nat., (2) XVI, p. 64.

*Camponotus sylvaticus* EMERY, 1881, Ann. Mus. Civ. Genova, XVI, p. 525 (♂, ♀). MAGRETTI, 1884, Bull. Soc. Ent. Italiana, XV, (1883), p. 244 (♂, ♀). BINGHAM, 1903, Ann. Mag. Nat. Hist., (7) XII, p. 62 (♂, ♀).

*Camponotus sylvaticus* var. *maculatus* MAGRETTI, 1884, Bull. Soc. Ent. Italiana, XV, (1883), p. 244 (♂, ♀); 1884, Ann. Mus. Civ. Genova, XXI, p. 536 (♂, ♀). LONGSTAFF, 1911, Ent. Monthly Mag., XLVII, p. 124 (♂).

*Camponotus rubripes* subsp. *maculatus* FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 149.

*Camponotus (Myrmoturba) maculatus* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 249 (♂). SANTSCHI, 1914, Bull. Lab. Zool. Gen. Agrar. Portici, VIII, p. 379 (♂, ♀); 1914, Deutsch. Ent. Zeitschr., p. 288 (♂); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 129 (♂, ♂). STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 403 (♂).

*Camponotus maculatus* subsp.? LAMBORN, 1914, Trans. Ent. Soc. London, (1913), p. 444.

SENEGAMBIA: Dakar (C. Alluaud); Thiès (F. Silvestri). SOUTHERN NIGERIA: Oni Camp east of Lagos (Lamborn). CAMEROON: Duala (v. Rothkirch). FRENCH CONGO: Fort Archambault (Schubotz). BELGIAN CONGO: Kiambi (J. Bequaert); Kasindi (Schubotz). RHODESIA: (G. Arnold); Shoshong Road Station (Dixey and Longstaff). BECHUANALAND: Khakhea (L. Schultze); Artesia (Dixey and Longstaff). GERMAN SOUTHWEST AFRICA: (Lübberth; Kunze); Okahandja (Casper; Dinter). CAPE PROVINCE: (Wilms); Cape Town; Kimberley (E. Simon); King William's Town (R. Godfrey); East London (Dixey and Longstaff). ORANGE FREE STATE: Bloemfontein (E. Simon). TRANSVAAL: Makapan; Hamman's Kraal (E. Simon); Pretoria (Distant); Hebron (E. Simon); Barberton (Rendall); Lydenburg (Wilms); Johannesburg (Dixey and Longstaff; Distant). NATAL: The Bluff, Durban; Sydenham, Durban (Dixey and Longstaff). MOZAMBIQUE: (Peters). ZANZIBAR: (Stuhlmann); Bawi Island near Zanzibar (Stuhlmann). GERMAN EAST AFRICA: Kilimanjaro (Bornemisza); Ulenge Island (H. Prell); Bulko; Uluguru Mts. (Zimmer); Meru (Sjöstedt); Tanga (Alluaud and Jeannel). BRITISH EAST AFRICA: Mombasa (v. d. Decken; Alluaud and Jeannel); Shimoni; Tiwi (Alluaud and Jeannel); Lamu Island; Fundu Island near Pemba; Manda Island; Patta Island (Voeltzkow). SOMALILAND: (C. Keller); Obbia (Bricchetti-Robecchi); Milmil (Pavesi); wells of Laffarugh to wells of Aberio (V. Bottego); Magala Re Umberto (Ruspoli); Lugh; Matagoi to Lugh (V. Bottego). ABYSSINIA: Ganale; Bela; Daua; Ogaden (Ruspoli); Webi (Bricchetti-Robecchi); Sancurar to Amarr Burgi; Lake Bass Narok (V. Bottego). ERITREA: Maassaua; Assab (Doria and Beccari); Ghinda (K. Escherich). ANGLO-EGYPTIAN SUDAN: Kaka, White Nile (I. Trägårdh); Assuan; Khor Attar; Gondokoro (F. Werner); Metemma; Kassala; Sebderat (Magretti); Khartum (Longstaff). SOKOTRA: Ras Shoab. SOUTHERN ARABIA: Aden (O. Simony); Gischin (W. Hein).

61. Var. *thomensis* SANTSCHI, 1920, 'Études Maladies Parasites Cacaoyer S. Thomé,' X, p. 3 (♂, ♀, ♂).

Type locality: SAN THOMÉ (de Seabra).

6a. Subsp. **adenensis** EMERY, 1893, Ann. Soc. Ent. France, LXII, p. 257 (♀, ♀); 1895, Ann. Soc. Ent. Belgique, XXXIX, p. 337; 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 604.

Type locality: Aden, southern ARABIA (E. Simon; Doria; C. Alluaud).

ABYSSINIA: Salole (Ruspoli).

6a<sub>1</sub>. Var. **assabensis** EMERY, 1893, Ann. Soc. Ent. France, LXII, p. 258 (♀); 1896, Mem. Accad. Sc. Bologna, (5) V, p. 768.

Type locality: Assab, ERITREA.

6b. Subsp. **egyptiacus** EMERY, 1915, Bull. Soc. Ent. France, p. 79; 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 22 (♀).

Type locality: EGYPT.

ERITREA.

6c. Subsp. **agricola** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 454 (♀).

Type locality: Mountains of NATAL (R. C. Wroughton).

6c<sub>1</sub>. Var. **tacitus** SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 240 (♀).

Type locality: NATAL (Haviland).

6d. Subsp. **atramentarius** FOREL, 1905, Ann. Soc. Ent. Belgique, XLIX, p. 180. LICHTWARDT, 1908, Deutsch. Ent. Zeitschr., p. 338. FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 26 (♀, ♀); 1911, Rev. Zool. Afr., I, p. 280 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 131 (♀). BUCHNER, 1918, Arch. Microsc. Anat., XCI, Abt. 2, p. 78, footnote.

*Camponotus maculatus* var. *atramentarius* FOREL, 1904, Ann. Mus. Zool. Ac. Sc. St. Pétersbourg, VIII, (1903), p. 379 (♀).

Type locality: ABYSSINIA (Dmitriev).

NATAL: Durban (Wilms). MOZAMBIQUE: Lobombo Borges (Wilms). BELGIAN CONGO: Uele-Bili. UGANDA: M'Bale (C. Alluaud). BENGUELA (C. Wellman).

6d<sub>1</sub>. Var. **cluis** FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 67 (♀); 1911, Rev. Zool. Afr., I, p. 280 (♀).

Type locality: BENGUELA (C. Wellman).

East Africa (between the Great Lakes).

6d<sub>2</sub>. Var. **cluisoides** (FOREL).

*Camponotus maculatus* var. *cluisoides* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 354 (♀).

Type locality: Campo Tembo, Tsavo, BRITISH EAST AFRICA (Bayer).

6e. Subsp. **brutus** (FOREL) MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 150 (♂); 1896, Ent. Tidskr., XVII, p. 249. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 769; 1899, Ann. Soc. Ent. Belgique, XLIII, p. 501 (♀). FOREL, 1901, Mitt. Naturh. Mus. Hamburg, XVIII, p. 69 (♀). SJÖSTEDT, 1904, 'I Västafrikas Urskogar,' p. 507. FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 54 (♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 393 (♀, ♀). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 148 (♀). FOREL, 1911, Rev. Zool. Afr., I, p. 280 (♀); 1913, *ibid.*, II, p. 340 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 355 (♀, ♀, ♂); 1914, Rev. Suisse Zool., XXII, p. 267. SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 379 (♀). STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 403 (♀). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 442 (♀, ♀, ♂). BUCHNER, 1918, Arch. Microsc. Anat., XCI, Abt. 2, p. 78, footnote. See p. 236.

*Camponotus rubripes* subsp. *brutus* FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 155 (♀, ♀).

*Camponotus brutus* DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 223. L. REH, 1905, Zeitschr. f. Pflanzenkrankh., XV, p. 134 (♀). AULMANN and LA BAUME, 1912, 'Fauna d. Deutsch. Kolon.,' V, 3, p. 62. AULMANN, 1913, *ibid.*, V, 5, p. 92.

*Camponotus (Myrmoturba) brutus* EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 255.

Type locality: Chinchoxo, PORTUGUESE CONGO (Falkenstein).

SIERRA LEONE: Samlia Falls, River N'Gamie (Mocquersys). LIBERIA. FERNANDO PO: (Schultze). CAMEROON: (Sjöstedt; H. Brauns); Victoria (F. Silvestri; H. Winkler); Mundame (Conradt); Nssanakang (Rudatis); Bibundi; Mokundange (Tessmann); Yukaduma (Schultze). SPANISH GUINEA: Alen (Tessmann). FRENCH CONGO: Brazzaville (A. Weiss); Sibange; Sette-Cama (Soyaux; Hupfer). BELGIAN CONGO: (Kohl); Yabena Mabote, Lomami; Kondué (Luja); Lukula (Daniel); Beni (Borgerhoff); Dungu, Mayombe (Deleval); Kiniati; Congo da Lemba (R. Mayné); Mayombe (de Brie); Avakubi; Medje; Faradje; Bafwasende; Stanleyville; Batama; Lukolela; Malela; Isangi; Nouvelle Anvers; Zambi; Poko; Akenge; Niangara (Lang and Chapin); Malela (J. Bequaert); Kimuenza (Schultze); Libenge (Schubotz).

6e1. Var. *lycurgus* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 501 (♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 393 (♀). See p. 236.

Type locality: CAMEROON.

IVORY COAST. FRENCH CONGO: Brazzaville (A. Weiss); Ogowé. BELGIAN CONGO: Leopoldville (Lang and Chapin).

6f. Subsp. *cavallus* SANTSCHI, 1911, Rev. Zool. Afr., I, p. 211 (♀, ♀). STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 403 (♀). SANTSCHI, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 347, fig. 4b (♀).

Type locality: Cucala, BENGUELA (J. Cruchet).

BELGIAN CONGO: Duma (Schubotz).

6g. Subsp. *cognatus* (F. SMITH) EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), p. 566 (♀). ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 1 (♀). MAYR, 1896, Ent. Tidskr., XVII, p. 249. FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 26 (♀, ♀). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 148 (♀).

*Formica cognata* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 35 (♀).

*Camponotus rubripes* ROGER, 1863, Berlin. Ent. Zeitschr., VII, p. 129 (♀, ♀, ♂); 1863, 'Verzeich. Formicid.,' p. 2. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 401. FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 143.

*Camponotus sylvaticus* subsp. *cognatus* FOREL, 1879, Bull. Soc. Vaudoise Sc. Nat., (2) XVI, p. 65.

*Camponotus sylvaticus* subsp. *cognatus* var. *rubripes* FOREL, 1879, Bull. Soc. Vaudoise Sc. Nat., (2) XVI, p. 66 (♀).

*Camponotus sylvaticus* var. *cognatus* MAGRETTI, 1884, Ann. Mus. Civ. Genova, XXI, p. 536 (♀); 1884, Bull. Soc. Ent. Italiana, XV, (1883), p. 244 (♀).

*Camponotus rubripes* subsp. *cognatus* FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 151; 1890, *ibid.*, XXXIII, C. R., p. lv (♀).

*Camponotus maculatus* var. *cognatus* MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 195. H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 36. ZAVATTARI, 1909, 'Il Ruwenzori, Parte Scientific.,' I, p. 215 (♀, ♂).

*Camponotus cognatus* DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 225. WASMANN, 1899, Deutsch. Ent. Zeitschr., p. 411. BERGROTH, 1915, Wien. Ent. Zeitg., XXXIV, p. 291.



*Camponotus maculatus* subsp. *carinatus* var. *cognatus* EMERY, 1894, Mem. Accad. Sc. Bologna, (5) IV, p. 112 (♀, ♀); 1895, Ann. Soc. Ent. France, LXIV, p. 46.

Type locality: Port Natal, NATAL.

IVORY COAST: Assinie (C. Alluaud). TOGO: Bismarckburg (Conradt). FERNANDO PO: (Conradt). FRENCH CONGO: Ogowe (Mocquers). GERMAN SOUTH-WEST AFRICA: (Lübbert). CAPE PROVINCE: Kamaggas; Cape Flats, Bergvliet (L. Schultze); Cape Town (E. Simon); Port Elizabeth (H. Brauns). MOZAMBIQUE: Inhambane (Fornasini); Quilimane (Stuhlmann). UGANDA: Sanda; Katende; Mitiana; Butiti (Duke of Abruzzi). ANGLO-EGYPTIAN SUDAN: Suakin; Kor Langhebb (Magretti).

6g<sub>1</sub>. Var. *ballioni* FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 27.

*Camponotus maculatus* subsp. *ballioni* FOREL, 1904, Ann. Soc. Ent. Belgique, XLVIII, p. 176 (♀).

Type locality: Cape of Good Hope.

CAPE PROVINCE: Port Elizabeth (H. Brauns).

6g<sub>2</sub>. Var. *boerus* FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 27 (♀, ♀):

Type locality: Steinkopf, CAPE PROVINCE (L. Schultze).

CAPE PROVINCE: Kamaggas (L. Schultze).

6h. Subsp. *congolensis* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 499, fig. (♀, ♀). FOREL, 1901, Mitt. Naturh. Mus. Hamburg, XVIII, p. 69 (♀); 1909, Ann. Soc. Ent. Belgique, LIII, p. 54 (♀, ♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 393 (♀, ♀). FOREL, 1913, Rev. Zool. Afr., II, p. 340 (♀, ♂). BEQUAERT, *ibid.*, p. 430. FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 250 (♀). BUCHNER, 1918, Arch. Microsc. Anat., XCI, Abt. 2, p. 78, footnote. See p. 235.

Type locality: Banana, BELGIAN CONGO (Busschodts).

WEST AFRICA: (H. Freyschmidt). LIBERIA: Cape Mesurado. FRENCH CONGO: Brazzaville (A. Weiss). BELGIAN CONGO: Kinshasa (Waelbroeck); Boma Sundi (Rollin); Kisantu (J. Bequaert); Beni (Borgerhoff); Yakuluku; Garamba; Faradje; Medje; Niangara (Lang and Chapin). RHODESIA: Bindura (G. Coqhill).

6i. Subsp. *desantii* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 280, figs. 14a-c (♀, ♀, ♂).

Type locality: Kouandé, UPPER DAHOMEY (Desanti).

6j. Subsp. *fornasinii* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 46 (♀); 1896, Mem. Accad. Sc. Bologna, (5) L, p. 769. FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 288 (♀).

*Camponotus* (*Myrmoturba*) *fornasinii* FOREL, 1914, Rev. Suisse Zool., XXII, p. 267. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 255.

Type locality: Delagoa Bay, PORTUGUESE EAST AFRICA.

NATAL: (Bates).

6k. Subsp. *guttatus* EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 498 (♀, ♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 393 (♀). FOREL, 1913, Rev. Suisse Zool., XXI, p. 670 (♀, ♀, ♂). See p. 234.

Type locality: CAMEROON (Conradt).

FRENCH CONGO: Brazzaville (A. Weiss). BELGIAN CONGO: Zambi (Lang, Chapin, and J. Bequaert).

Type locality: Patta Island, BRITISH EAST AFRICA (Voeltzkow).

GERMAN EAST AFRICA: Bukoba, Victoria Nyanza (Schubotz).

12. **Camponotus (Myrmoturba) werthi** FOREL, 1914, Rev. Suisse Zool., XXII, p. 268; 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 253 (♀).

*Camponotus werthi* FOREL, 1908, Bull. Soc. Vaudoise Sc. Nat., (5) XLIV, p. 18 (♀). ENDERLEIN, 1909, 'Deutsch. Südpolar-Expedition,' X, 4, pp. 340, 393, and 426 (♀).

Type locality: KERGUELEN (Werth); probably imported from the Cape, since it was found in a house only.

CAPE PROVINCE: Caledon (E. P. Phillips). CROZET ARCHIPELAGO: Possession Island (Werth).

### Subgenus 2. **Dinomyrmex** ASHMEAD

*Dinomyrmex* ASHMEAD, 1905, Canadian Ent., XXXVII, p. 384.

*Camponotus* subg. *Myrmogigas* FOREL, 1912, Mém. Soc. Ent. Belgique, XX, p. 91.

*Camponotus* subg. *Dinomyrmex* FOREL, 1914, Rev. Suisse Zool., XXII, p. 259. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 236.

Subgenotype: *Formica gigas* Latreille, 1802.

13. **Camponotus (Dinomyrmex) æquatorialis** ROGER. FOREL, 1914, Rev. Suisse Zool., XXII, p. 268. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 256.

*Camponotus æquatorialis* ROGER, 1863, Berlin. Ent. Zeitschr., VII, p. 135 (♀); 1863, 'Verzeich. Formicid.,' p. 2. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 458. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 220.

*Camponotus maculatus* ? subsp. *æquatorialis* EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 769.

*Camponotus equatorialis* SANTSCHI, 1911, Rev. Zool. Afr., I, p. 211 (♀).

Type locality: Gaboon, FRENCH CONGO.

FRENCH CONGO: (A. Weiss).

13a. Subsp. **kohli** FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 349 (♀).

Type locality: Bengamisa, BELGIAN CONGO (Kohl).

14. **Camponotus (Dinomyrmex) brevicollis** STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 401, fig. 13 (♀).

Type locality: between Fort de Possel and Fort Crampel, FRENCH CONGO (Schubotz).

15. **Camponotus (Dinomyrmex) cæsar** FOREL, 1914, Rev. Suisse Zool., XXII, p. 268. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 256. See p. 243.

*Camponotus cæsar* FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 162 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 223. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 768. FOREL, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 503, fig. (♀, ♀); 1909, ibid., LIII, p. 66 (♀). EMERY, 1912, Annuar. Mus. Zool. Univ. Napoli, N. S., III, No. 26, p. 2 (♀).

Type locality: ANGOLA (M. Buchner).

BENGUELA: (C. Wellman). BELGIAN CONGO: Faradjé (Lang and Chapin); Luapula River.

15a. Subsp. **imperator** EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 503, fig. (♀). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 149 (♀); 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08),' III, p. 391 (♀). See p. 244.

Type locality: CAMEROON (Conradt).

*Camponotus (Myrmoturba) natalensis* subsp. *fulvipes* FOREL, 1914, Rev. Suisse Zool., XXII, p. 267.

Type locality: Makapan, TRANSVAAL (E. Simon).

ZULULAND: (I. Trägårdh).

8b. Subsp. *diabolus* FOREL, 1879, Bull. Soc. Vaudoise Sc. Nat., (2) XVI, p. 81 (♀). EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 771.

*Camponotus diabolus* DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 228.

*Camponotus (Myrmoturba) diabolus* FOREL, 1914, Rev. Suisse Zool., XXII, p. 267.

Type locality: Lessouto, BASUTOLAND (P. Berthoud).

9. *Camponotus (Myrmoturba) roubaudi* SANTSCHI. FOREL, 1913, Rev. Zool. Afr., II, p. 340 (♀); 1914, Rev. Suisse Zool., XXII, p. 267. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 255.

*Camponotus roubaudi* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXIX, p. 365, fig. (♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss and Roubaud).

BELGIAN CONGO: Beni (Borgerhoff).

9i. Var. *agonia* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 282 (♀).

Type locality: Lugombe, BELGIAN CONGO (Gérard).

10. *Camponotus (Myrmoturba) sacchii* EMERY. FOREL, 1914, Rev. Suisse Zool., XXII, p. 267. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 255.

*Camponotus sacchii* EMERY, 1899, Ann. Mus. Civ. Genova, XXXIX, p. 501 (♀).

Type locality: Buditu to Dimé, ABYSSINIA (V. Bottego).

11. *Camponotus (Myrmoturba) somalinus* ERN. ANDRÉ. FOREL, 1914, Rev. Suisse Zool., XXII, p. 267. SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 132 (♀). EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 255.

*Camponotus somalinus* ERN. ANDRÉ, 1887, Rev. d'Ent. Caen, VI, p. 280 (♀). EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 120. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 253. MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 195. EMERY, 1895, Ann. Mus. Civ. Genova, XXXV, p. 180. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 150. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 768; 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 604. H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 37. EMERY, 1899, Ann. Mus. Civ. Genova, XXXIX, p. 500; 1901, Bull. Soc. Ent. Italiana, XXXIII, p. 63. MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicid.,' p. 11; in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 20. FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 371 (♀).

Type locality: SOMALILAND.

EGYPT. SOMALILAND: Magala Re Umberto (Ruspoli); Mogadiscio; Obbia; between Obbia and Berbera (Bricchetti-Robecchi). ABYSSINIA: Sancurar to Amarr Burgi; Dimé to Bass Narok; Arussi Galla, Ganale Gudda (V. Bottego). ERITREA: Asmara (Mancini and Ruggeri). BRITISH EAST AFRICA: Taveta; Mombasa (C. Alluaud). GERMAN EAST AFRICA: Tanga (Zimmer); Mbusini, Useguia (Stuhlmann); Daressalaam (H. Brauns); Kahe; Mt. Kilimanjaro (Sjöstedt).

11i. Var. *curtior* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 65 (♀). EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 768.

Type locality: SOUTHERN ABYSSINIA (Ilg).

11i. Var. *pattensis* FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 91 (♀).

*Camponotus somalicus* var. *pattensis* STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08),' III, p. 392 (♀).

*Camponotus sexpunctatus* var. *liengmei* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 67 (♀).

*Camponotus maculatus* subsp. *sexguttatus* var. *liengmei* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 46.

*Camponotus maculatus* subsp. *sexpunctatus* var. *liengmei* EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 769.

*Camponotus maculatus* var. *liengmei* FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 88 (♀, ♂).

Type locality: Delagoa Bay, PORTUGUESE EAST AFRICA (Liengme).

NATAL: Durban (G. Arnold). TRANSVAAL: Pretoria (E. Simon). CAPE PROVINCE: Kimberley (E. Simon); Algoa Bay (H. Brauns). BRITISH EAST AFRICA: Fundu Island, W. Pemba (Voeltzkow). ZANZIBAR: (Voeltzkow).

6r. Var. **hansingi** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 452 (♀); 1911, Sitzb. Bayer. Akad. Wiss., p. 288; 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 250 (♀).

Type locality: Beira, PORTUGUESE EAST AFRICA (H. Hansing).

ORANGE FREE STATE: Reddersburg (H. Brauns). CAPE PROVINCE: Willowmore (G. Arnold).

6r<sub>2</sub>. Var. **importunoides** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 249 (♀).

Type locality: Smithwinkle Bay, CAPE PROVINCE (E. P. Phillips).

6s. Subsp. **manzer** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 452 (♀); 1911, Rev. Zool. Afr., I, p. 280 (♀?). SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 509 (♀, ♂).

Type locality: Victoria Falls, RHODESIA (R. C. Wroughton; G. Arnold).

GERMAN EAST AFRICA: Kigerama and Weranjanje, near Kagera (between the great lakes).

6s<sub>1</sub>. Var. **contaminatus** SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), p. 291 (♀).

Type locality: Matoppo Hills, SOUTHERN RHODESIA (G. Arnold).

6t. Subsp. **mathildæ** FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 266 (♀, ♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 130 (♀).

Type locality: Zoutpansberg, 800 m., TRANSVAAL (Rolle).

BRITISH EAST AFRICA: Kenia Region, 1800-2000 m.; Amboni River, 1800 m. (Alluaud and Jeannel).

6u. Subsp. **melanocnemis** (SANTSCHI) FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 355 (♀); 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 250 (♀). SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 278, fig. 14d (♀). See p. 234.

*Camponotus maculatus* var. *melanocnemis* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXIX, p. 368 (♀).

Type locality: FRENCH CONGO (H. Pobeguïn).

FRENCH CONGO: Grand Lahou (H. Pobeguïn). BELGIAN CONGO: Ubangi (Augustin); Dungu to Niangara, village of Denge (Hutereau); Faradje; Yakuluku (Lang and Chapin). NATAL: Durban (G. Arnold).

6u<sub>1</sub>. Var. **flavominor** SANTSCHI, 1920, 'Études Maladies Parasites Cacaoyer S. Thomé,' X, p. 4, footnote (♀).

Type locality: Kouandé, UPPER DAHOMEY (Desanti).

6l. Subsp. **hannæ** SANTSCHI, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 349, fig. 4a (♀).

Type locality: Victoria Falls, RHODESIA (G. Arnold).

6m. Subsp. **hieroglyphicus** SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), p. 290 (♀, ♀).

Type locality: Caconda, BENGUELA (J. Cruchet).

6n. Subsp. **importunus** FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 288 (♀, ♀, ♂).

*Camponotus maculatus* subsp. *sexpunctatus* var. *importunus* FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 27 (♀).

Type locality: CAPE PROVINCE (Krebs).

CAPE PROVINCE: Matjesfontein (Wilms); Algoa Bay; Port Elizabeth (H. Brauns). MOZAMBIQUE: Lobombo Borges (Wilms).

6o. Subsp. **intonsus** EMERY, 1905, Rend. Accad. Sc. Bologna, N. S., IX, p. 29, footnote (♀).

Type locality: CAPE PROVINCE.

TRANSVAAL.

6p. Subsp. **kersteni** (GERSTÄCKER) FOREL, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 309 (♀); 1914, Rev. Suisse Zool., XXII, p. 267.

*Camponotus kersteni* GERSTÄCKER, 1871, Arch. f. Naturg., XXXVII, 1, p. 355 (♀); 1873, in 'v. d. Decken's Reisen in Ost-Afrika, Gliederthiere,' p. 344 (♀; nec ♂). EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 770. H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 37.

*Camponotus kersteni* DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 237.

*Camponotus* (*Myrmoturba*) *kersteni* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 131 (2, ♀, ♀, ♂). EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 255.

Type locality: Mt. Kilimanjaro, 8000 ft., GERMAN EAST AFRICA (v. d. Decken).

GERMAN EAST AFRICA: Mt. Kilimanjaro, 2740-3000 m. (C. Alluaud). Dalla Torre's record "Zanzibar" is erroneous.

6q. Subsp. **lacteipennis** (F. SMITH) EMERY, 1896, Mem. Accad. Sc. Bologna, (5) I, p. 768. FOREL, 1914, Rev. Suisse Zool., XXII, p. 267.

*Formica lacteipennis* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 34 (♀, ♀, ♂). MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 416.

*Camponotus lacteipennis* ROGER, 1863, 'Verzeich. Formicid.,' p. 2. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 237.

*Camponotus sylvaticus* subsp. *lacteipennis* MAYR, 1886, Verh. Zool. Bot. Ges. Wien, XXXVI, p. 355.

*Camponotus* (*Myrmoturba*) *lacteipennis* EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 255.

Type locality: Port Natal, NATAL.

TRANSVAAL: Makapan; Pretoria (E. Simon).

6r. Subsp. **liengmei** FOREL, 1897, Abhandl. Senckenberg. Naturf. Ges., XXI, p. 188 (♀, ♀); 1901, Mitt. Naturh. Mus. Hamburg, XVIII, p. 69 (♀, ♀); 1914, Rev. Suisse Zool., XXII, p. 267; 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 249 (♀).<sup>1</sup>

<sup>1</sup>Santschi (1921) removes this to *Dinomyrmex*, in which case it should be treated as a variety of *C. sexpunctatus* Forel, as originally described.

6u. Var. **lohieri** SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 313 (♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 379 (♀, ♀); 1915, Ann. Soc. Ent. France, LXXXIV, p. 279 (♀).

*Camponotus (Myrmoturba) maculatus* var. *lohieri* EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 22 (♀).

Type locality: Jacquerville, IVORY COAST (Lohier).

SENEGAL. FRENCH GUINEA: Konakry (F. Silvestri). UPPER DAHOMEY: Kouandé (Desanti). SAN THOMÉ: (Gravier). ERITREA: Asmara (F. Silvestri).

6us. Var. **schantzei** (FOREL) SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 279 (♀).

*Camponotus maculatus* var. *schantzei* FOREL, 1912, Mitt. Naturh. Mus. Hamburg, XXIX, p. 179 (♀, ♂).

*Camponotus (Myrmoturba) maculatus* subsp. *schantzei* SANTSCHI, 1914; 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 130 (♀).

Type locality: Entebbe, UGANDA (Schultze).

UGANDA: Western Unyoro, between Hoima and Butiaba; Mt. Ruwenzori, Ibanda, 1400 m. (C. Alluaud). BRITISH EAST AFRICA: Kisumu, Victoria Nyanza (C. Alluaud).

6ua. Var. **semispicatus** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 279 (♀).

*Camponotus (Myrmoturba) maculatus* subsp. *mathildæ* var. *semispicata* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 130 (♀).

Type locality: Nairobi, Kikuyu, 1700 m., BRITISH EAST AFRICA (Alluaud and Jeannel).

BRITISH EAST AFRICA: Naivasha in the Rift Valley, 1900 m.; Gilgil, 1980 m.; Nakuru, 1280 m.; Kijabé on the Kikuyu Escarpment, 2100 m.; Masai Steppe near Nairobi (Alluaud and Jeannel).

6v. Subsp. **minusculus** VIEHMEYER, 1914, Arch. f. Naturg., LXXIX, Abt. A, Heft 12, (1913), p. 44 (♀, ♀). SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 282, fig. 15a (♀).

Type locality: Manow, Langenburg, GERMAN EAST AFRICA.

6w. Subsp. **miserabilis** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 379 (♀); 1915, Ann. Soc. Ent. France, LXXXIV, p. 281, fig. 15b (♀).

Type locality: Kindia, FRENCH GUINEA (F. Silvestri).

6w<sub>1</sub>. Var. **pessimus** WM. M. WHEELER. See p. 235 (♀).

Type locality: Yakuluku, BELGIAN CONGO (Lang and Chapin).

6x. Subsp. **negus** FOREL, 1907, Rev. d'Ent. Caen, XXVI, p. 142 (♀, ♀, ♂).

Type locality: Kounhi, southern ABYSSINIA (de Rothschild).

ABYSSINIA: Abou; Mt. Zyoul near the Colba River; Uomber (de Rothschild).

BRITISH EAST AFRICA: Rendilé, Mt. Karoli (de Rothschild).

6x<sub>1</sub>. Var. **beritchi** FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 348 (♀).

Type locality: George, CAPE PROVINCE (H. Brauns).

6x<sub>2</sub>. Var. **etiennei** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 453 (♀).

Type locality: Banana, BELGIAN CONGO (Etienne).

6x<sub>3</sub>. Var. **nefassitensis** FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 266 (♀); 1911, Sitzb. Bayer. Akad. Wiss., p. 290 (♀, ♀, ♂). KARAWAIEW, 1911, Rev. Russe Ent., XI, p. 11 (♀, ♀).

*Camponotus (Myrmoturba) maculatus* subsp. *negus* var. *nefasitensis* EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 4 (♀).

Type locality: Nefasit, ERITREA (K. Escherich; F. Silvestri).

EGYPT: Port Sudan (Karawaiew).

6y. Subsp. *pictiventris* MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 28 (♀). FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 27 (♀, ♀).

Type locality: Port Elizabeth, CAPE PROVINCE (H. Brauns).

CAPE PROVINCE: Kamaggas (L. Schultze).

6y<sub>1</sub>. Var. *immaculifrons* SANTSCHI, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 349 (♀).

Type locality: Willowmore, CAPE PROVINCE (H. Brauns).

6y<sub>2</sub>. Var. *octomaculatus* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 452 (♀).

Type locality: NATAL, 5300 ft. (R. C. Wroughton).

6z. Subsp. *pulvinatus* MAYR, in Sjöstedt, 1907, 'Kilimandjaro, Meru Exped.,' II, 8, p. 20 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 130 (♀).

Type locality: Kibonoto, Mt. Kilimanjaro, GERMAN EAST AFRICA (Sjöstedt).

UGANDA: Western Unyoro, between Hoima and Butiaba; Lake Albert (C. Alluaud).

6a'. Subsp. *radamoides* (FOREL). See p. 1042.

6a<sub>1</sub>. Var. *cataractæ* SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 239 (♀).

Type locality: Victoria Falls, RHODESIA (G. Arnold).

6a<sub>2</sub>. Var. *diffusus* SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), pp. 292 and 293 (♀).

Type locality: Matoppo Hills, SOUTHERN RHODESIA (G. Arnold).

NATAL: (v. Muralt; I. Trägårdh).

6a<sub>3</sub>. Var. *liocnemis* (EMERY) SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), p. 293 (♀).

*Camponotus maculatus* subsp. *lacteipennis* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 46 (♀).

*Camponotus maculatus* subsp. *liocnemis* EMERY, 1905, Rend. Accad. Sc. Bologna, N. S., IX, p. 30, footnote (♀).

*Camponotus maculatus* subsp. *atramentarius* var. *liocnemis* FOREL, 1907, Mitt. Naturh. Mus. Hamburg, XXIV, p. 16; 1909, Ann. Soc. Ent. Belgique, LIII, p. 54; in Schultze, 1910, 'Forschungsreise in Südafrika,' p. 26 (♀); 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 371 (♀); 1913, Rev. Zool. Afr., II, p. 340 (♀). BEQUAERT, *ibid.*, p. 430.

*Camponotus (Myrmoturba) maculatus* subsp. *liocnemis* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 379 (♀, ♀).

*Camponotus (Myrmoturba) maculatus* subsp. *liocnemis* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 38 (♀, ♀, ♂). TRÄGÅRDH, *ibid.*, p. 46.

Type locality: Makapan, TRANSVAAL (E. Simon).

BELGIAN CONGO: Welgelegen (J. Bequaert). ANGOLA: Quifangondo (F. Silvestri). GERMAN SOUTHWEST AFRICA: (Lübbert; Casper). BASUTOLAND. TRANSVAAL: Pretoria (E. Simon). NATAL: Greymine; Stamford Hill (I. Trägårdh). ZULULAND: (I. Trägårdh). MOZAMBIQUE. GERMAN EAST AFRICA: Buiko.

6a'. Var. **madecassus** (EMERY) SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), pp. 292 and 293 (♀). See p. 1042.

NATAL: (I. Trägårdh).

6b'. Subsp. **scheneri** FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 289 (♀, ♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 379 (♀); 1915, Ann. Soc. Ent. France, LXXXIV, p. 280.

Type locality: Nebena, LIBERIA (Scherer).

SOUTHERN NIGERIA: Olokemeji (F. Silvestri). FRENCH GUINEA: Kakoulima (F. Silvestri).

6c'. Subsp. **solon** (FOREL) EMERY, 1896, Mem. Accad. Sc. Bologna, (5) L, p. 769; 1899, Ann. Soc. Ent. Belgique, XLIII, p. 500 (♀, ♀). FOREL, 1909, *ibid.*, LIII, pp. 54 (♀) and 73 (♀, ♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXXVIII, (1909), p. 393 (♀, ♀). FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 452 (♀). STRTZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 149 (♀, ♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 255 (♀); 1914, Rev. Suisse Zool., XXII, p. 267; 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 348 (♀); 1916, Rev. Suisse Zool., XXIV, p. 442 (♀). See p. 235.

*Camponotus rubripes* subsp. *solon* FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 152 (♀).

*Camponotus solon* DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 253.

*Camponotus (Myrmoturba) solon* EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 255.

Type locality: Malange, ANGOLA (M. Buchner).

CAMEROON: Mundame (Conradt). FRENCH CONGO: Brazzaville (A. Weiss). BELGIAN CONGO: Katanga (Lemaire); Kinshasa (Waelbroeck); Lumbulumbu; St. Gabriel (Kohl); Kimpoko (Büttner); Sankuru (Luja); Nyangwe to Stanleyville (Fauconnet); Boma (Styczinski), Medje; Niangara; Akenge; Bafwabaka (Lang and Chapin).

6c'. Var. **chilon** FOREL, 1901, Mitt. Naturh. Mus. Hamburg, XVIII, p. 68 (♀, ♀); 1911, Sitzb. Bayer. Akad. Wiss., p. 288.

*Camponotus (Myrmoturba) maculatus* subsp. *brutus* var. *chilon* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 379 (♀).

Type locality: Senegal.

SENEGAMBIA: Thiès (F. Silvestri). DAHOMEY: (Martensen). SOUTHERN NIGERIA: Old Calabar (Bates).

6c'. Var. **jugurtha** Wm. M. WHEELER. See p. 236 (♀).

Type locality: Batama, BELGIAN CONGO (Lang and Chapin).

6d'. Subsp. **thales** FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 453 (♀, ♀, ♂); 1913, *ibid.*, LVII, p. 145 (♀).

Type locality: BASUTOLAND (R. C. Wroughton).

CAPE PROVINCE: Reddersburg (H. Brauns).

6d'. Var. **empedocles** FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 224 (♀).

Type locality: Salisbury, SOUTHERN RHODESIA (G. Arnold).

6e'. Subsp. **thoracicus** (FABRICIUS).

*Formica thoracica* FABRICIUS, 1804, 'Syst. Piez.,' p. 397 (♀). ROGER, 1862, Berlin. Ent. Zeitschr., VI, p. 285.

Type locality: BARBARY (Stub).

6e'. Var. **fellah** EMERY, 1908, Deutsch. Ent. Zeitschr., p. 194 (♀, ♀, ♂).



*Camponotus maculatus* subsp. *oasium* var. *fellah* EMERY, 1891, 'Explor. Tunisie, Fourmis,' p. 18 (♀).

*Camponotus maculatus* subsp. *fellah* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 267 (♀).

Type locality: EGYPT.

SYRIA. WESTERN ABYSSINIA: (Ilg).

6e<sub>2</sub>. Var. **incommodus** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 250 (♀).

Type locality: CAPE PROVINCE.

6f'. Subsp. **trægaordhi** SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 38 (♀, ♀, ♂). TRÄGÅRDH, *ibid.*, p. 46.

Type locality: Stamford Hill, NATAL (I. Trägårdh).

NATAL: Durban (I. Trägårdh). ZULULAND: Dukudu (I. Trägårdh).

6f<sub>1</sub>. Var. **muger** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 250 (♀).

Type locality: Durban, NATAL (H. B. Marley).

6g'. Subsp. **weissi** SANTSCHI, 1910, Ann. Soc. Ent. France, LXXIX, p. 368 (♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 355 (♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

BELGIAN CONGO: Boma (Styczinski).

7. **Camponotus (Myrmoturba) maguassa** WM. M. WHEELER. See p. 237 (♀).

Type locality: Avakubi, BELGIAN CONGO (Lang and Chapin).

8. **Camponotus (Myrmoturba) natalensis** (F. SMITH) FOREL, 1914, Rev. Suisse Zool., XXII, p. 267. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 255.

*Formica natalensis* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 33 (♀, ♀, ♂). MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 418.

*Camponotus natalensis* ROGER, 1863, 'Verzeich. Formicid.,' p. 2. FOREL, 1879, Bull. Soc. Vaudoise Sc. Nat., (2) XVI, p. 79. MAYR, 1886, Verh. Zool. Bot. Ges. Wien, XXXVI, p. 355. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 244. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 771. BINGHAM, 1903, Ann. Mag. Nat. Hist., (7) XII, p. 63 (♀). FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 29 (♀).

Type locality: Port Natal, NATAL (R. W. Plant).

WEST AFRICA: (Fülleborn). TRANSVAAL: Pretoria (Distant).

8<sub>1</sub>. Var. **politiceps** SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 38 (♀).

Type locality: Pietermaritzburg, NATAL (I. Trägårdh).

8a. Subsp. **corvus** FOREL, 1879, Bull. Soc. Vaudoise Sc. Nat., (2) XVI, p. 79 (♀, ♀, ♂). EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 51; 1896, Mem. Accad. Sc. Bologna, (5) V, p. 771.

*Camponotus corvus* DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 227.

Type locality: Valdezia, TRANSVAAL (P. Berthoud).

TRANSVAAL: Pretoria; Makapan (E. Simon).

8a<sub>1</sub>. Var. **fulvipes** EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 51 (♀); 1896, Mem. Accad. Sc. Bologna, (5) V, p. 771.

*Camponotus (Myrmoturba) natalensis* var. *fulvipes* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 38 (♀, ♀, ♂).

CAMEROON: Lomie (Thesing); Mundame (Conradt). BELGIAN CONGO: Kasongo Forest (Grauer); Isangi (Lang and Chapin).

16. **Camponotus (Dinomyrmex) caffer** EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 256.

*Camponotus caffer* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 47 (♀), Pl. II, figs. 25, 26; 1896, Mem. Accad. Sc. Bologna, (5) V, p. 768. FOREL, 1904, Ann. Soc. Ent. Belgique, XLVIII, p. 177.

*Camponotus maculatus* subsp. *caffer* FOREL, 1901, Mitt. Naturh. Mus. Hamburg, XVIII, p. 69 (♀, ♀).

*Camponotus (Myrmoturba) caffer* FOREL, 1914, Rev. Suisse Zool., XXII, p. 267. Type locality: Makapan, TRANSVAAL (E. Simon).

CAPE PROVINCE: Port Elizabeth (H. Brauns); Cape of Good Hope.

17. **Camponotus (Dinomyrmex) immigrans** SANTSCHI, 1921, Ann. Soc. Ent. Belgique, LXI, p. 312 (♀).

*Camponotus (Myrmothrix) immigrans* SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 436 (♀, ♀, ♂).

*Camponotus* (? *Myrmothrix*) *immigrans* EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 256.

Type locality: Molundu, CAMEROON (Reichensperger).

18. **Camponotus (Dinomyrmex) langi** Wm. M. WHEELER. See p. 241. (♀, ♀, ♂).

Type locality: Faradje, BELGIAN CONGO (Lang and Chapin).

BELGIAN CONGO: Garamba (Lang and Chapin).

19. **Camponotus (Dinomyrmex) longipes** (GERSTÄCKER) FOREL, 1913, Rev. Zool. Afr., II, p. 340 (♀); 1914, Rev. Suisse Zool., XXII, p. 268; 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 249 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 132 (♀, ♀ ?). EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 256.

*Formica longipes* GERSTÄCKER, 1858, Monatsb. Ak. Wiss. Berlin, p. 262 (♀); in Peters, 1862, 'Reise n. Mossambique, Zool.,' V, p. 509 (♀), Pl. xxxii, fig. 7.

*Camponotus longipes* ROGER, 1863, 'Verzeich. Formicid.,' p. 2. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 400. GERSTÄCKER, 1871, Arch. f. Naturg., XXXVII, 1, p. 354; 1873, in 'v. d. Decken's Reisen in Ost-Afrika, Gliederthiere,' p. 343 (♀). FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 164 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 240. EMERY, 1894, Mem. Accad. Sc. Bologna, (5) IV, p. 113 (♂). FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 70. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 768. H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 37. FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 91 (♀, ♂); 1907, Mitt. Naturh. Mus. Hamburg, XXIV, p. 16 (♀); 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 266 (♀); 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 371 (♀). STRTZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08),' III, p. 391 (♀).

Type locality: Mozambique, PORTUGUESE EAST AFRICA (Peters).

BELGIAN CONGO: Sankisia (J. Bequaert); Boga, west of Mt. Ruwenzori (Schubotz). SOUTHERN RHODESIA: Mondu River (Zeally). PORTUGUESE EAST AFRICA: Inhambane (Fornasini). NYASALAND: Shore of Lake Nyasa (Heyne). GERMAN EAST AFRICA: Himo River, Mt. Kilimanjaro (C. Alluaud); Barikiwa (Schröder); Mafia Island (Voeltzkow); Daressalaam (A. Müller). ZANZIBAR: (Hildebrandt). BRITISH EAST AFRICA: Ndara (v. d. Decken); Moschi to the Uganda Railroad (Zimmer); Nairobi, Kikuyu, 1700 m.; Taveta, 750 m.; Voi, Taita; Mt. Kenia,

Meranga District, Fort Hall; Cheteni (Alluaud and Jeannel); Chake-Chake, Pemba Island; Fundu, W. Pemba (Voeltzkow). UGANDA: Buzubizi (C. Alluaud). WESTERN ABYSSINIA: (Ilg).

20. **Camponotus (Dinomyrmex) massinissa** Wm. M. WHEELER. See p. 244 (♀).

Type locality: Medje, BELGIAN CONGO (Lang and Chapin).

21. **Camponotus (Dinomyrmex) pompeius** FOREL. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 256.

*Camponotus rubripes* subsp. *pompeius* FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 157 (♀).

*Camponotus pompeius* DALLA TORRE, 1893, 'Cat. Hym.', VII, p. 248. EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 501, fig. (♂, ♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 393 (♂, ♀). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 149 (♂, ♀).

*Camponotus maculatus* subsp. *pompeius* EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 769.

*Camponotus (Myrmogigas) pompeius* SANTSCHI, 1914, Deutsch. Ent. Zeitschr., p. 288 (♀).

*Camponotus (Myrmoturba) pompeius* FOREL, 1914, Rev. Suisse Zool., XXII, p. 267. STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 403 (♀).

Type locality: Gaboon, FRENCH CONGO (Büttner).

TOGO: Bismarckburg (Conradt). CAMEROON: Duala (v. Rothkirch); Campo Mountains (Schultze); Mundame (Conradt). FRENCH CONGO: Brazzaville (A. Weiss). BELGIAN CONGO: Libenge; Duma (Schubotz).

21a. Subsp. **cassius** Wm. M. WHEELER. See p. 239 (♀).

Type locality: Yakuluku, BELGIAN CONGO (Lang and Chapin).

BELGIAN CONGO: Medje (Lang and Chapin).

21b. Subsp. **marius** EMERY, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 502, fig. (♀). STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 403 (♂, ♀). See p. 239.

*Camponotus maculatus* subsp. *cognatus* MAYR, 1896, Ent. Tidskr., XVII, p. 249 (nec F. Smith).

Type locality: CAMEROON (Conradt; Sjöstedt).

CAMEROON: Molundu; Yukaduma (Schultze). FRENCH CONGO: Gaboon. BELGIAN CONGO: Duma (Schubotz); Kimuenza (Schultze); Medje; Akenge; Niapu (Lang and Chapin).

22. **Camponotus (Dinomyrmex) sexpunctatus** FOREL, 1914, Rev. Suisse Zool., XXII, p. 268. SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 133 (♂, ♀). EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 256.

*Camponotus sexpunctatus* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 66 (♂, ♀).

*Camponotus maculatus* subsp. *sexpunctatus* EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 769. ALLUAUD and JEANNEL, 1914, Arch. Zool. Gén. Exp., LIII, p. 375.

Type locality: Delagoa Bay, PORTUGUESE EAST AFRICA (P. Berthoud).

BRITISH EAST AFRICA: Kibwezi, Wa-Kamba (C. Alluaud). ZANZIBAR: Haitajwa Cave (Alluaud and Jeannel).

23. **Camponotus (Dinomyrmex) varus** FOREL, 1914, Rev. Suisse Zool., XXII, p. 268. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 256.

*Camponotus varus* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 455 (♀).

Type locality: MOSSAMEDES (Baum and Van der Kellen).

24. **Camponotus (Dinomyrmex) wellmani** FOREL, 1913, Rev. Zool. Afr., II, p. 340 (♀); 1914, Rev. Suisse Zool., XXII, p. 268. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 256.

*Camponotus wellmani* FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 67 (♀, ♀); 1911, Rev. Zool. Afr., I, p. 281 (♀). SANTSCHI, *ibid.*, p. 211 (♀). FOREL, 1912, Mitt. Naturh. Mus. Hamburg, XXIX, p. 180 (♀).

*Camponotus (Dinomyrmex) wellmanni* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 441 (♀).

Type locality: BENGUELA (C. Wellman).

BENGUELA: Cucala (J. Cruchet). BELGIAN CONGO: Beni (Murtula); Kapema; Kipaila (S. Neave); Bamayanga. GERMAN EAST AFRICA: Kifumbiro to Karagwe, between the great lakes.

24a. Var. **rufipartis** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 441 (♀, ♀, ♂). See p. 245.

Type locality: BELGIAN CONGO (Kohl).

BELGIAN CONGO: Stanleyville; Faradje; Ngayu; Niangara (Lang and Chapin).

### Subgenus 3. **Myrmosericus** FOREL

*Camponotus* subg. *Myrmosericus* FOREL, 1912, Mém. Soc. Ent. Belgique, XX, p. 91; 1914, Rev. Suisse Zool., XXII, p. 259. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 236.

Subgenotype: *Formica rufoglaucia* Jerdon, 1851.

25. **Camponotus (Myrmosericus) angusticeps** EMERY. FOREL, 1914, Rev. Suisse Zool., XXII, p. 268. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 256.

*Camponotus angusticeps* EMERY, 1886, Bull. Soc. Ent. Italiana, XVIII, p. 355 (♀), Pl. xvii, fig. 1. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 221. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 770.

Type locality: Cape of Good Hope (L. Péringuey).

26. **Camponotus (Myrmosericus) druryi** FOREL, 1914, Rev. Suisse Zool., XXII, p. 268. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 256.

*Camponotus druryi* FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 160 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 229. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 769. H. STADELMANN, 1898, Deutsch-Ost-Afrika, IV, Hym., p. 37.

Type locality: ZANZIBAR (Hildebrandt).

27. **Camponotus (Myrmosericus) eugeniae** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 146 (♀); 1914, Rev. Suisse Zool., XXII, p. 268. SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 41 (♀). TRÄGÅRDH, *ibid.*, p. 46. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 256.

*Camponotus micans* subsp. *eugeniae* FOREL, 1879, Bull. Soc. Vaudoise Sc. Nat., (2) XVI, p. 78 (♀).

*Camponotus eugeniae* FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 174 (♀, ♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 230. EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 50; 1896, Mem. Accad. Sc. Bologna, (5) V, p. 770.

*Camponotus rufoglaucus* var. *eugenixæ* MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 195. H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 36.

Type locality: Valdezia, TRANSVAAL (P. Berthoud).

SOUTHERN RHODESIA: Springvale (G. Arnold). TRANSVAAL: Makapan (E. Simon). CAPE PROVINCE: Kimberley (E. Simon). BASUTOLAND: Lessouto (P. Berthoud). ZULULAND: Junction of the Umfolosi Rivers (I. Trägårdh). GERMAN EAST AFRICA: Kihengo (Stuhlmann).

27a. Subsp. **amplior** FOREL, 1913, Rev. Zool. Afr., II, p. 341 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 355 (♀).

Type locality: Sankisia, BELGIAN CONGO (J. Bequaert).

BELGIAN CONGO: Old Kasongo (J. Bequaert).

28. **Camponotus (Myrmosericus) petersi** EMERY. FOREL, 1914, Rev. Suisse Zool., XXII, p. 268; 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 254 (♀). EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 256.

*Camponotus petersii* EMERY, in litt., FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 70 (without description). EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 50 (♀), Pl. II, fig. 28; 1896, Mem. Accad. Sc. Bologna, (5) V, p. 770. FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 30 ((♀); 1910, Ann. Soc. Ent. Belgique, LIV, p. 451.

Type locality: Vrijburg, CAPE PROVINCE (E. Simon).

RHODESIA: Bulawayo (G. Arnold). TRANSVAAL: Pretoria (E. Simon); Lydenburg (Wilms). NATAL: (Haviland). PORTUGUESE EAST AFRICA: Delagoa (Liengme).

28. Var. **janus** FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 288 (♀).

Type locality: Bothaville, ORANGE FREE STATE (H. Brauns).

29. **Camponotus (Myrmosericus) rufoglaucus** (JERDON) FOREL, 1912, Mém. Soc. Ent. Belgique, XX, p. 91; 1914, Rev. Suisse Zool., XXII, p. 268. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 256.

*Formica rufoglauca* JERDON, 1851, Madras Journ. Litt. Sc., XVII, p. 124; 1854, Ann. Mag. Nat. Hist., (2) XIII, p. 107 (♀).

*Camponotus rufoglaucus* EMERY, 1895, Ann. Soc. Ent. France, LXIV, pp. 48, footnote and 50, footnote, fig. (♀); 1896, Mem. Accad. Sc. Bologna, (5) V, p. 770.

Type locality: Carnatic, INDIA (Jerdon).

29a. Subsp. **cinctellus** (GERSTÄCKER) FOREL, 1897, Abhandl. Senckenberg. Naturf. Ges., XXI, p. 188 (♀); 1901, Mitth. Schweiz. Ent. Ges., X, p. 311; in Baum, 1903, 'Kunene-Sambesi Expedition,' p. 564; in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 89; 1909, Ann. Soc. Ent. Belgique, LIII, p. 67 (♀); in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 25 (♀). KARAWAIEW, 1911, Rev. Russe Ent., XI, p. 12 (♀). FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 371 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 356 (♀). SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 381 (♀, ♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 133 (♀); 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 41. TRÄGÅRDH, ibid., p. 46. See p. 246.

*Formica cinctella* GERSTÄCKER, 1858, Monatsb. Ak. Wiss. Berlin, p. 262 (♀, ♀, ♂); in Peters, 1862, 'Reise n. Mossambique, Zool.,' V, p. 510 (♀, ♀, ♂). MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 413.

*Camponotus cinctellus* ROGER, 1863, 'Verzeich. Formicid.,' p. 2. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 224.

*Camponotus venustus* FRAUENFELD, 1867, Verh. Zool. Bot. Ges. Wien, XVII, p. 441 (♀). MAYR, 1878, *ibid.*, XXVIII, p. 662, footnote (♀).

*Camponotus rufoglaucus* var. *cinctellus* MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 195. EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 48, footnote (♀); 1895, Ann. Mus. Civ. Genova, XXXV, p. 180; 1896, *ibid.*, XXXVII, p. 158 (♀); 1896, Mem. Accad. Sc. Bologna, (5) V, p. 770. H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 36.

Type locality: Mozambique, PORTUGUESE EAST AFRICA (Peters).

BELGIAN CONGO: Zambi (J. Bequaert); Congo da Lemba; Mondombe; Mandungu; Eala (R. Mayné); Leopoldville (J. Maes). BENGUELA: (C. Wellman). MOSSAMEDES: between the Cubango and Cuito Rivers (Baum and Van der Kellen). TRANSVAAL: Pretoria (F. Silvestri). NATAL: (v. Schuckardt); Stamford Hill (I. Trägårdh). PORTUGUESE EAST AFRICA: Delagoa (Liengme); Tete (Peters); Lobombo Borges (Wilms). East Africa: common (Voeltzkow). GERMAN EAST AFRICA: Sachsenwald near Daressalaam (H. Prell); Uluguru Mts.; Amani (Zimmer); Tanga (Zimmer; C. Alluaud). ZANZIBAR: (Stuhlmann; Voeltzkow); Mwera River (C. Alluaud). BRITISH EAST AFRICA: Gazi; Likoni; Tiwi; Mombasa; Buru, Wa-Taita; Fort Hall, Kikuyu, 1330 m. (Alluaud and Jeannel). SOMALILAND: Matagoi to Lugh (V. Bottego). ABYSSINIA: Boran Galla, Middle Ganale (V. Bottego). ANGLO-EGYPTIAN SUDAN: Khartum (Karawaiew).

29a<sub>1</sub>. Var. *intuens* FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 67 (♀); 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 271 (♀); 1913, Rev. Zool. Afr., II, p. 340 (♀).

Type locality: BENGUELA (C. Wellman).

BELGIAN CONGO: Kwesi to Kilo (Bayer). ERITREA: Nefasit (K. Escherich).

29a<sub>2</sub>. Var. *rufigenis* FOREL, 1913, Rev. Zool. Afr., II, p. 341 (♀). BEQUAERT, *ibid.*, p. 430. See p. 246.

Type locality: Sankisia, BELGIAN CONGO (J. Bequaert).

BELGIAN CONGO: Stanleyville; Medje; Poko; Akenge; Niangara; Garamba; Faradje (Lang and Chapin).

29a<sub>3</sub>. Var. *ustithorax* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 271 (♀); 1911, Bull. Soc. Vaudoise Sc. Nat., (5) LXVII, p. 371 (♀). STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08),' III, p. 392 (♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 356 (♀); 1913, Rev. Zool. Afr., II, p. 340 (♀); 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 350 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 133 (♀).

Type locality: Ghinda, ERITREA (K. Escherich).

BELGIAN CONGO: Beni (Borgerhoff); St. Gabriel (Kohl); Yambata; Mandungu; Mondombe (R. Mayné); Karemi (Bayer); Kwidjwi Island, Lake Kivu (Schubotz). GERMAN EAST AFRICA: Buiko; Monga (H. Prell); Amani; Ulenge (Zimmer). BRITISH EAST AFRICA: Kavirondo Bay, Victoria Nyanza, 1112 m. (Alluaud and Jeannel). UGANDA: Western Unyoro, between Hoima and Butiaba; Ibanda, Mt. Ruwenzori, 1400 m. (C. Alluaud); Chacansengula to Kasengui (Bayer).

29b. Subsp. *controversus* SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 509.

*Camponotus rufoglaucus* subsp. *flavopilosus* VIEHMEYER, 1914, Arch. f. Naturg., LXXIX, Abt. A, Heft 12, (1913), p. 47 (♀) (*nec* *C. fulvopilosus* var. *flavopilosus* Emery, 1895).

Type locality: Manow, Langenburg, GERMAN EAST AFRICA.

BELGIAN CONGO: Lungube, Katanga (Gérard).

29c. Subsp. *cosmicus* (F. SMITH) EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 49; 1896, Mem. Accad. Sc. Bologna, (5) V, p. 770. MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 20. STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 401 (♀).

*Formica cosmica* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 34 (♀). MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 413.

*Camponotus cosmicus* ROGER, 1863, 'Verzeich. Formicid.,' p. 2. MAYR, 1886, Verh. Zool. Bot. Ges. Wien, XXXVI, p. 355. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 227. G. K. MARSHALL, 1902, Trans. Ent. Soc. London, pp. 535 and 569 (♀), Pl. XIX, figs. 55 and 56. BINGHAM, 1903, Ann. Mag. Nat. Hist., (7) XII, p. 63 (♀). DIXEY and LONGSTAFF, 1907, Trans. Ent. Soc. London, pp. 331 and 375.

Type locality: Port Natal, NATAL (R. W. Plant).

TRANSVAAL: Waterval Onder (Ross); Pretoria; Hamman's Kraal (E. Simon). CAPE PROVINCE: Hebron; De Aar (E. Simon); East London (Dixey and Longstaff). NATAL: Estcourt (Dixey and Longstaff). GERMAN EAST AFRICA: Ngare na Nyuki, Meru (Sjöstedt). BELGIAN CONGO: Duma (Schubotz). RHODESIA: Salisbury (Marshall).

29d. Subsp. *flavomarginatus* (MAYR) EMERY, 1895, Ann. Soc. Ent. France, LXIV, pp. 48, footnote (♀) and 50, footnote, fig.; 1896, Mem. Accad. Sc. Bologna, (5) V, p. 770; 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 604; 1899, *ibid.*, XXXIX, p. 501. FOREL, 1907, Rev. d'Ent. Caen, XXVI, p. 144 (♀, ♀, ♂). REICHENSBERGER, 1913, Zool. Jahrb. Abt. Syst., XXXV, p. 215. See p. 247.

*Camponotus flavomarginatus* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 664 (♀); 1863, *ibid.*, XIII, p. 399. ROGER, 1863, 'Verzeich. Formicid.,' p. 2. EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 365 (♀).

*Camponotus micans* var. *flavomarginatus* FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 174 (♀, ♀).

*Camponotus micans* subsp. *albisectus* EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 120 (♀).

*Camponotus albisectus* DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 221.

*Camponotus rufoglaucus* subsp. *cinctellus* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 70.

*Camponotus rufoglaucus* subsp. *cinctellus* var. *flavomarginatus* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 271 (♀).

*Camponotus* (*Myrmosericus*) *albisectus* FOREL, 1914, Rev. Suisse Zool., XXII, p. 268.

*Camponotus* (*Myrmosericus*) *rufoglaucus* subsp. *cinctellus* var. *flavomarginatus* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 41 (♀). FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 254 (♀).

Type locality: Akwapim Mountains, GOLD COAST.

ABYSSINIA: Harar; Tchercher; confluent Akaki; Karssa; Mt. Zyoual; Kounhi; Barko; Bourkà (de Rothschild); Bass Narok (V. Bottego); western Abyssinia (Ilg). ERITREA: Keren (Beccari). SOMALILAND: Ganale (Ruspoli); Mogadiscio (Bricchetti-Robecchi). NATAL: Stamford Hill (I. Trägårdh); Durban (C. B. Cooper). PORTUGUESE EAST AFRICA: Delagoa Bay (Liengme). TRANSVAAL:

Valdezia (P. Berthoud). ANGOLA: (M. Buchner). BELGIAN CONGO: Thysville (J. Bequaert); Akenge; Vankercckhovenille; Garamba; Faradje (Lang and Chapin).

29d. Var. **contrarius** SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 509 (♀).

Type locality: Victoria Falls, RHODESIA (G. Arnold).

29d<sub>2</sub>. Var. **paucipubens** SANTSCHI, 1911, Rev. Zool. Afr., I, p. 212 (♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 381 (♀).

*Camponotus rufoglaucus* subsp. *cinctellus* var. *paucipubens* FOREL, 1913, Rev. Zool. Afr., II, p. 341 (♀). BEQUAERT, *ibid.*, p. 430. STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 401 (♀).

Type locality: Cucala, BENGUELA (J. Cruchet).

ANGOLA: Quifangondo (F. Silvestri). BELGIAN CONGO: Welgelegen (J. Bequaert). FRENCH CONGO: Fort Crampel (Schubotz).

29e. Subsp. **syphax** WM. M. WHEELER. See p. 246 (♀).

Type locality: Zambi, BELGIAN CONGO (Lang, Chapin, and J. Bequaert).

BELGIAN CONGO: Boma (Lang, Chapin, and J. Bequaert).

29f. Subsp. **vestitus** (F. SMITH) EMERY, 1894, Mem. Accad. Sc. Bologna, (5) IV, p. 113 (♀). FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 70. EMERY, 1895, Ann. Soc. Ent. France, LXIV, pp. 48, 49, footnote (♀), and 50, footnote, fig.; 1896, Mem. Accad. Sc. Bologna, (5) V, p. 770. FOREL, 1907, Mitt. Naturh. Mus. Hamburg, XXIV, p. 16 (♀). SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 41 (♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 381 (♀).

*Formica vestita* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 32 (♀). MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 422.

*Camponotus rufoglaucus* subsp. *cinctellus* var. *vestita* FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 89; in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 25 (♀, ♀); 1910, Ann. Soc. Ent. Belgique, LIV, p. 457 (♀, ♀); 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 272 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 355 (♀); 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 254 (♀).

Type locality: Port Natal, NATAL.

CAPE PROVINCE: Cape Town (E. Simon; Bergius; Wilms); Mafeking (G. Arnold). TRANSVAAL: Pretoria (F. Silvestri); Lydenburg (Wilms). NATAL: (Haviland). ZULULAND: Junction of the Umfolosi Rivers (I. Trägårdh). PORTUGUESE EAST AFRICA: Delagoa (Liengme); Mozambique (Fornasini). GERMAN SOUTHWEST AFRICA: (Lübbert); Okahandja (Peters; Casper); Grootfontein (v. Erffer). BELGIAN CONGO: Elisabethville (Leplae); Karemi (Bayer); valley of the Lubumbashi (Buttgenbach). WESTERN ABYSSINIA: (Ilg). East Africa: (Voeltzkow).

29f<sub>1</sub>. Var. **pectitus** SANTSCHI, 1911, Rev. Zool. Afr., I, p. 212 (♀, ♀).

*Camponotus (Myrmosericus) rufoglaucus* subsp. *cinctellus* var. *pectita* FOREL, 1913, Deutsch. Ent. Zeitschr., Beih., p. 224 (♀).

Type locality: Cucala, BENGUELA (J. Cruchet).

FRENCH CONGO: Moyen Chari (Decorse). SOUTHERN RHODESIA: Bembesi (G. Arnold).

29g. Subsp. **zanzibaricus** FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 287 (♀).

Type locality: ZANZIBAR.

29h. Subsp. **zimmermanni** (FOREL) EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 49, footnote; 1896, Mem. Accad. Sc. Bologna, (5) V, p. 770; 1896, Ann. Mus. Civ. Genova, XXXVII, p. 158 (♀); 1897, *ibid.*, XXXVIII, p. 604 (♀).



*Camponotus zimmermanni* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 66 (♂); 1904, Ann. Mus. Zool. Ac. Sc. St. Pétersbourg, VIII, (1903), p. 381 (♂).

*Camponotus (Myrmosericus) zimmermanni* EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 256.

Type locality: SOUTHERN ABYSSINIA (Ilg).

BRITISH EAST AFRICA: Maddo Wells (V. Bottego). SOMALILAND: Salmoreto (Ruspoli). ABYSSINIA: Harar (Dmitriev); Webi (Ruspoli).

29i. Subsp. **zulu** EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 49, footnote, and p. 50 (♂); 1896, Mem. Accad. Sc. Bologna, (5) V, p. 770; 1895, Ann. Mus. Civ. Genova, XXXV, p. 180. SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 41 (♂).

Type locality: Isipingo, NATAL (Weitzacker).

NATAL: Verulam (Weitzacker); Amanzimtoti (Trägårdh). ABYSSINIA: Arussi Galla, Ganale Gudda (V. Bottego).

30. **Camponotus (Myrmosericus) valdeziæ** FOREL, 1914, Rev. Suisse Zool., XXII, p. 268.

*Camponotus valdeziæ* FOREL, 1879, Bull. Soc. Vaudoise Sc. Nat., (2) XVI, p. 90 (♂, ♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 256. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 770. MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 20.

Type locality: Valdezia, TRANSVAAL (P. Berthoud).

GERMAN EAST AFRICA: Kilimanjaro (Sjöstedt).

#### Subgenus 4. **Orthonotomyrmex** ASHMEAD

*Orthonotomyrmex* ASHMEAD, 1906, Proc. Ent. Soc. Washington, VIII, p. 31.

*Orthonotus* ASHMEAD, 1905, Canadian Ent., XXXVII, p. 384 (nec Westwood, 1829).

*Camponotus* subg. *Myrmentoma* FOREL, 1912, Mém. Soc. Ent. Belgique, XX, p. 92.

*Camponotus* subg. *Orthonotomyrmex* FOREL, 1914, Rev. Suisse Zool., XXII, p. 264. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 244.

Subgenotype: *Formica sericea* Fabricius, 1798 (Ashmead, 1905); *Formica lateralis* Olivier, 1791 (Forel, 1914).

31. **Camponotus (Orthonotomyrmex) acutisquamis** MAYR. FOREL, 1914, Rev. Suisse Zool., XXII, p. 273. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 257.

*Camponotus acutisquamis* MAYR, 1902, Verh. Zool. Bot. Ges. Wien, LII, p. 296 (♂).

*Camponotus chrysurus* subsp. *acutisquamis* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 269; 1913, Rev. Suisse Zool., XXI, p. 670 (♂, ♀).

*Camponotus (Orthonotomyrmex) chrysurus* subsp. *acutisquamis* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 357 (♂); 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 256 (♂); 1916, Rev. Suisse Zool., XXIV, p. 444 (♀, ♂).

Type locality: Bonjongo, CAMEROON (R. Buchholz).

CAMEROON: (Conradt). BELGIAN CONGO: (Kohl); Mayombe (de Briey).

32. **Camponotus (Orthonotomyrmex) arminius** (FOREL) EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 257.

*Camponotus barbarossa* subsp. *arminius* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 457 (♀).<sup>1</sup>

Type locality: Delagoa, PORTUGUESE EAST AFRICA (Liengme).

32i. Var. **bicontractus** (FOREL).

*Camponotus barbarossa* subsp. *arminius* var. *bicontractus* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 256 (♀).

Type locality: Durban, NATAL (G. Arnold).

33. **Camponotus (Orthonotomyrmex) braunsi** MAYR. FOREL, 1914, Rev. Suisse Zool., XXII, p. 273; 1913, Ann. Soc. Ent. Belgique, LVII, p. 357 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 135 (♀). EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 257.<sup>2</sup>

*Camponotus braunsi* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 151 (♀). EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 774. MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 28, footnote (♀, ♀).

*Camponotus (Myrmentoma) braunsi* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 146 (♀).

Type locality: Delagoa Bay, PORTUGUESE EAST AFRICA (H. Brauns).

RHODESIA: (G. Arnold). BELGIAN CONGO: Congo da Lemba (R. Mayné). GERMAN EAST AFRICA: New Moschi, Mt. Kilimanjaro, 800 m. (Alluaud and Jeannel); Waboniland.

33a. Subsp. **erythromelus** EMERY, 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 605; 1898, Rend. Accad. Sc. Bologna, N. S., II, p. 227; 1899, Ann. Mus. Civ. Genova, XXXIX, p. 501 (♀).

*Camponotus erythromelus* EMERY, 1896, *ibid.*, XXXVII, p. 158, fig. (♀).

Type locality: Lugh, SOMALILAND (V. Bottego).

SOMALILAND: Matagoi to Lugh (V. Bottego); Magala Re Umberto (Ruspoli). ABYSSINIA: Ganale River; Ogaden (Ruspoli); Sancurar to Amarr Burgi (V. Bottego).

33ai. Var. **transitorius** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 135 (♀).

Type locality: River Amboni, Mt. Kenia, BRITISH EAST AFRICA (C. Alluaud).

34. **Camponotus (Orthonotomyrmex) chrysurus** GERSTÄCKER. FOREL, 1913, Rev. Zool. Afr., II, p. 346 (♀); 1914, Rev. Suisse Zool., XXII, p. 273; 1914, Ann. Soc. Ent. Belgique, LVII, p. 357 (♀, ♀); 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 350 (♀, ♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 135 (♀, ♀). EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 257.<sup>3</sup>

*Camponotus chrysurus* GERSTÄCKER, 1871, Arch. f. Naturg., XXXVII, 1, p. 355 (♀); 1873, in 'v. d. Decken's Reisen in Ost Afrika, Gliederthiere,' p. 345 (♀), Pl. XIV, fig. 9. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 224. EMERY, 1895, Ann. Mus. Civ. Genova, XXXV, p. 183 (♀); 1896, Mem. Accad. Sc. Bologna, (5) V, p. 774. H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 37. FOREL, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 308 (♀); 1909, *ibid.*, LIII, p. 67 (♀). BEQUAERT, 1913, Rev. Zool. Afr., II, p. 431.

Type locality: Ndara, BRITISH EAST AFRICA (v. d. Decken).

<sup>1</sup>*Camponotus barbarossa* "Emery, *in litt.*" Forel, 1914, Rev. Suisse Zool., XXII, p. 273, has never been described. Santschi (1921) makes *C. arminius* the type of his subgenus *Myrmopelta*.

<sup>2</sup>Placed by Santschi (1921) in his subgenus *Myrmisolepis*.

<sup>3</sup>Placed by Santschi (1921) in his subgenus *Myrmopelta*.

BELGIAN CONGO: Elisabethville; Sankisia (J. Bequaert); St. Gabriel (Kohl); Congo da Lemba; Mondombe (R. Mayné); Mayombe (de Briey). BENGUELA: (C. Wellman). GERMAN EAST AFRICA: New Moschi, Mt. Kilimanjaro, 800 m. (Alluaud and Jeannel). ABYSSINIA: Arussi Galla, Ganale Gudda (V. Bottego). BRITISH EAST AFRICA: Nairobi, Kikuyu, 1700 m. (Alluaud and Jeannel); Tsavo (Bayer).

34. Var. **apellis** (FOREL) SANTSCHI, 1911, Rev. Zool. Afr., I, p. 213.

*Camponotus chrysurus* subsp. *acutisquamis* var. *apellis* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 269 (♀); 1911, Rev. Zool. Afr., I, p. 281 (♀). STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 397 (♀).

Type locality: BENGUELA (C. Wellman).

BENGUELA: Cucala (J. Cruchet). BELGIAN CONGO: Banana (Etienne); Duma (Schubotz).

34a. Subsp. **kohlbrunneri** FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 268 (♀).

Type locality: WESTERN ABYSSINIA (Ilg).

35. **Camponotus (Orthonotomyrmex) dofleini** FOREL. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 257.

*Camponotus dofleini* FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 291 (♀).

*Camponotus (Myrmosphincta) dofleini* FOREL, 1914, Rev. Suisse Zool., XXII, p. 273.

Type locality: Bothaville, ORANGE FREE STATE (H. Brauns).

36. **Camponotus (Orthonotomyrmex) epinotalis** SANTSCHI, 1916, Ann. Soc. Ent. France, LXXXIV, (1915), p. 508 (♀). EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 257.<sup>1</sup>

Type locality: Victoria Falls, RHODESIA (G. Arnold).

37. **Camponotus (Orthonotomyrmex) erinaceus** GERSTÄCKER. FOREL, 1914, Rev. Suisse Zool., XXII, p. 273. SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 135 (♀). EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 257.<sup>2</sup>

*Camponotus erinaceus* GERSTÄCKER, 1871, Arch. f. Naturg., XXXVII, 1, p. 355 (♀); 1873, in 'v. d. Decken's Reisen in Ostafrika, Gliederthiere,' p. 345 (♀), Pl. xiv, fig. 10. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 229. EMERY, 1895, Ann. Mus. Civ. Genova, XXXV, p. 183 (♀); 1896, Mem. Accad. Sc. Bologna, (5) V, p. 774. H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 38. FOREL, 1899, Ann. Soc. Ent. Belgique, XLIII, p. 306 (♀); 1907, Ann. Mus. Nat. Hungarici, V, p. 31 (♀). MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 21 (♀, ♀). FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 371 (♀).

Type locality: Arusha, GERMAN EAST AFRICA (v. d. Decken).

GERMAN EAST AFRICA: Kilimanjaro (Bornemisza); Kibosho, Mt. Kilimanjaro (C. Alluaud); Kibonoto, Kilimanjaro, 1300-1900 m. (Sjöstedt); Moschi (H. Prell). BRITISH EAST AFRICA: Monga (H. Prell); Nairobi, 1700 m. (Alluaud and Jeannel). ABYSSINIA: Arussi Galla, Ganale Gudda (V. Bottego).

38. **Camponotus (Orthonotomyrmex) mayri** FOREL, 1914, Rev. Suisse Zool., XXII, p. 273. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

*Camponotus mayri* FOREL, 1879, Bull. Soc. Vaudoise Sc. Nat., (2) XVI, p. 92 (♀), Pl. I, fig. 1; 1886, Ann. Soc. Ent. Belgique, XXX, p. 191 (♀). DALLA TORRE,

<sup>1</sup>Santschi (1921) makes this the type of his subgenus *Myrmisolepis*.

<sup>2</sup>Placed by Santschi (1921) in his subgenus *Myrmisolepis*.

1893, 'Cat. Hym.,' VII, p. 242. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 70. EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 55 (♀); 1896, Mem. Accad. Sc. Bologna, (5) V, p. 774. H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 37. FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 91 (♀). MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 21. SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 393 (♀). FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 451 (♀). STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exped. (1907-08),' III, p. 392 (♀).

*Camponotus (Myrmentoma) mayri* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 146 (♀).

Type locality: Valdezia, TRANSVAAL (P. Berthoud).

FRENCH CONGO: Brazzaville (A. Weiss). PORTUGUESE CONGO: Chinchoxo. BELGIAN CONGO: Kasindi (Schubotz). SOUTHERN RHODESIA: Springvale (G. Arnold). TRANSVAAL: Makapan; Pretoria; Hamman's Kraal (E. Simon). NATAL: Durban. PORTUGUESE EAST AFRICA: Delagoa (Liengme). GERMAN EAST AFRICA: Kibonoto, Kilimanjaro (Sjöstedt). ZANZIBAR: (Hildebrandt). BRITISH EAST AFRICA: Chake-Chake, Pemba Island (Voeltzkow); Mombasa (Hildebrandt).

38i. Var. *cubangensis* FOREL, 1895, Mitth. Schweiz. Ent. Ges., X, p. 309 (♀, ♀).

*Camponotus mayri* var. *kubangensis* FOREL, in Baum, 1903, 'Kunene-Sambesi Expedition,' p. 563 (♀).

Type locality: between the Cubango and Cuito Rivers, MOSSAMEDES (Baum and Van der Kellen).

38a. Subsp. *ledieui* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 444 (♀).

Type locality: Shilouvane, TRANSVAAL (Junod).

38b. Subsp. *sankisianus* FOREL, 1913, Rev. Zool. Afr., II, p. 347 (♀). SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 313.

Type locality: Sankisia, BELGIAN CONGO (J. Bequaert).

FRENCH CONGO: Mandouga (A. Weiss).

39. *Camponotus (Orthonotomyrmex) scalaris* FOREL. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.<sup>1</sup>

*Camponotus scalaris* FOREL, 1901, Mitth. Schweiz. Ent. Ges., X, p. 308 (♀).

*Camponotus (Myrmosphincta) scalaris* FOREL, 1914, Rev. Suisse Zool., XXII, p. 273.

Type locality: NATAL, 1800 m. (Haviland).

40. *Camponotus (Orthonotomyrmex) sericeus* (FABRICIUS) FOREL, 1914, Rev. Suisse Zool., XXII, p. 273. SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 134 (♀, ♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 381 (♀). EMERY, 1915, *ibid.*, X, p. 4 (♀). STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 397 (♀, ♂). EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258. See pp. 249 and 1050.

*Formica sericea* FABRICIUS, 1798, 'Suppl. Ent. Syst.,' p. 279 (♀). LATREILLE, 1802, 'Hist. Nat. Fourmis,' p. 117 (♀), Pl. III, fig. 17. COQUEBERT, 1804, 'Illustr. Iconogr. Ins.,' III, p. 99 (♀), Pl. XXII, fig. 12. LEPELETIER, 1836, 'Hist. Nat. Ins. Hym.,' I, p. 217 (♀). F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 31.

<sup>1</sup>Placed by Santschi (1921) in his subgenus *Myrmisolepis*.

*Formica aurulenta* LATREILLE, 1802, 'Hist. Nat. Fourmis,' p. 114 (♀), Pl. III, fig. 9. F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 31. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 412.

*Lasius sericeus* FABRICIUS, 1804, 'Syst. Piez.,' p. 416 (♀).

*Formica cinerascens* JERDON, 1851, Madras Journ. Litt. Sc., XVIII, p. 123 (♀, ♂) (*nec* Fabricius); 1854, Ann. Mag. Nat. Hist., (2) XIII, p. 106 (♀, ♂).

*Formica obtusa* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 30 (♀).

*Camponotus sericeus* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 675 (♀), Pl. XIX, fig. 4; 1863, *ibid.*, XIII, p. 401. ROGER, 1863, 'Verzeich. Formicid.,' pp. 2 and 44 (♀). MAYR, 1866, Verh. Zool. Bot. Ges. Wien, XVI, p. 886 (♀). EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 364 (♀, ♀). FOREL, 1879, Bull. Soc. Vaudoise Sc. Nat., (2) XVI, p. 94 (♀, ♀). EMERY, 1881, Ann. Mus. Civ. Genova, XVI, p. 526. ERN. ANDRÉ, 1882, 'Spec. Hym. Europ. Algérie,' II, p. 149 (♀). MAGRETTI, 1884, Bull. Soc. Ent. Italiana, XV, (1883), p. 244 (♀); 1884, Ann. Mus. Civ. Genova, XXI, p. 537 (♀, ♀). FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 192 (♀, ♀, ♂); 1892, Mitth. Schweiz. Ent. Ges., VIII, p. 19 (♀). EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 120; 1892, Ann. Soc. Ent. France, LX, (1891), p. 566 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 251. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 70. EMERY, 1895, Ann. Mus. Civ. Genova, XXXV, p. 184; 1896, Mem. Accad. Sc. Bologna, (5) V, p. 774; 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 605; 1899, *ibid.*, XXXIX, p. 501. G. K. MARSHALL, 1902, Trans. Ent. Soc. London, pp. 535 and 569 (♀), Pl. XIX, fig. 54. MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicid.,' p. 11. BINGHAM, 1903, Ann. Mag. Nat. Hist., (7) XII, p. 63 (♀). MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, S, p. 21; 1907, Sitzb. Ak. Wiss. Wien, math. naturw. Kl., CXVI, Abt. 1, p. 389. FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 91 (♀). F. F. KOHL, 1907, Denkschr. Ak. Wiss. Wien, LXXI, p. 283 (♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 393 (♀). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 149 (♀). FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 268 (♀). LONGSTAFF, 1911, Ent. Monthly Mag., XLVII, p. 124 (♀). KARAWAIEW, 1911, Rev. Russe Ent., XI, p. 11 (♀). LAMBORN, 1914, Trans. Ent. Soc. London, (1913), Proc., p. cxxiv.

*Camponotus (Myrmentoma) sericeus* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 146 (♀).

Type locality: Senegal (Bosc).

INDIA, CEYLON, ARABIA, EGYPT. SENEGAMBIA: Dakar (C. Alluaud; F. Silvestri); Cape Verde. TOGO: Misahöhe (Smend). SOUTHERN NIGERIA: Moor Plantation near Ibadan (Lamborn). FRENCH CONGO: Brazzaville (A. Weiss). BELGIAN CONGO: Medje; Poko; Faradje (Lang and Chapin); Duma (Schubotz); Kabare (J. Bequaert). ANGLO-EGYPTIAN SUDAN: Khartum (I. Trägårdh; Karawaiew); Kerreri (Longstaff); Suakin; Kor Langhebb; Kassala (Magretti). ERITREA: Keren; between Massaua and Ain (Beccari); Asmara; Ghinda (F. Silvestri); Assab (Doria and Beccari); Kor Lebka (Magretti). SOUTHERN ARABIA: Makalla (O. Simony). ABYSSINIA: (Ilg); Arussi Galla, Ganale Gudda; Dimé to Bass Narok; Bass Narok (V. Bottego); Coromma; Ettoko; Bela (Ruspoli). SOMALILAND: (C. Keller); Obbia (Bricchetti-Robecchi). UGANDA: Gondokoro (F. Werner); Western Unyoro, between Hoima and Butiaba (C. Alluaud). EAST AFRICA: common (Voeltzkow). BRITISH EAST AFRICA: Mt. Kenia, Meranga District, Fort Hall; Kisumu, Victoria Nyanza; Tchania River, 1520 m.; Likoni (Alluaud and Jeannel).

GERMAN EAST AFRICA: Kibonoto, Mt. Kilimanjaro, 1000-1200 m. (Sjöstedt); Himo River, Mt. Kilimanjaro (C. Alluaud). SOUTHERN RHODESIA: Salisbury (Marshall); Khami River (G. Arnold).

40. *Var. sulgeri* SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 313 (♀). *Camponotus (Orthonotomyrmex) sericeus* subsp. *sulgeri* STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 397 (♀, ♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

BELGIAN CONGO: Duma (Schubotz).

41. *Camponotus (Orthonotomyrmex) vividus* (F. SMITH) SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 264. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258. See p. 247.<sup>1</sup>

*Formica vivida* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 31 (♀). MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 422.

*Formica laboriosa* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 32 (♀). MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 416.

*Camponotus vividus* ROGER, 1863, 'Verzeich. Formicid.,' p. 2. MAYR, 1886, Verh. Zool. Bot. Ges. Wien, XXXVI, p. 354. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 257. EMERY, 1898, Rend. Accad. Sc. Bologna, N. S., II, p. 227.

*Camponotus laboriosus* ROGER, 1863, 'Verzeich. Formicid.,' p. 2. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 237. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 771.

*Colobopsis vivida* MAYR, 1886, Verh. Zool. Bot. Ges. Wien, XXXVI, p. 354.

*Camponotus meinerti* FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 189 (♀, ♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 242. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 70. ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 1 (♀, ♀). MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 151. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 775. FOREL, 1901, Mitt. Naturh. Mus. Hamburg, XVIII, p. 74; 1907, *ibid.*, XXIV, p. 16 (♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 393 (♀, ♀). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 149 (♀, ♀). FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 451 (♀); 1911, Rev. Zool. Afr., I, p. 282 (♀).

*Camponotus (Colobopsis) vividus* EMERY, 1889, Ann. Mus. Civ. Genova, XXVII, p. 517.

*Camponotus (Orthonotomyrmex) meinerti* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 381 (♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 357 (♀); 1913, Rev. Zool. Afr., II, p. 346 (♀, ♂); 1914, Rev. Suisse Zool., XXII, p. 273; 1916, *ibid.*, XXIV, p. 444 (♀, ♀). STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 396 (♀, ♀).

Type locality: SIERRA LEONE (D. F. Morgan).

SENEGAMBIA: Dakar (F. Silvestri). FRENCH GUINEA: Los Islands (H. Brauns); Konakry (F. Silvestri). SIERRA LEONE: (H. Brauns); Samlia Falls, River N'Gamie (Mocquerys). LIBERIA: (Kieselbach); Monrovia (Duke). GOLD COAST: Akra; Addah. TOGO: Bismarckburg (Conradt). SOUTHERN NIGERIA: Olokemeji (F. Silvestri). CAMEROON: Mundame (Conradt); Bibundi (Tessmann). FERNANDO PO: (Conradt). SPANISH GUINEA: Alen (Tessmann). FRENCH CONGO: Loango (H. Brauns); Gaboon (Büttner); Ogoewe (Mocquerys); Brazzaville; Mandouga (A.

<sup>1</sup>Placed by Santschi (1921) in his subgenus *Myrmopelta*.

Weiss); Fort Archambault; Fort de Possel to Fort Crampel; Mongumba (Schubotz). BELGIAN CONGO: Boma (H. Brauns); Kondué (Luja); Leopoldville (Dubois); Eala (R. Mayné); Mayombe (de Briey); Duma (Schubotz); Lukolela; Malela (Lang and Chapin). ANGOLA: Malange (M. Buchner). PORTUGUESE EAST AFRICA: Delagoa (Liengme); Ibo.

41j. Var. **semidepilis** Wm. M. WHEELER. See p. 248 (♀).

Type locality: Medje, BELGIAN CONGO (Lang and Chapin).

BELGIAN CONGO: Leopoldville (Lang and Chapin).

41a. Subsp. **cato** (FOREL). See p. 248.

*Camponotus (Orthonotomyrmex) meinerti* subsp. *cato* FOREL, 1913, *Rev. Zool. Afr.*, II, p. 346 (♀).

Type locality: Sankisia, BELGIAN CONGO (J. Bequaert).

BELGIAN CONGO: Stanleyville; Garamba; Medje; Avakubi; Akenge; Bengamisa; Niangara; Thysville (Lang and Chapin).

41b. Subsp. **reginæ** (FOREL).

*Camponotus reginæ* FOREL, 1901, *Mitth. Schweiz. Ent. Ges.*, X, p. 307 (♀); in Baum, 1903, 'Kunene-Sambesi Expedition,' p. 562 (♀); 1909, *Ann. Soc. Ent. Belgique*, LIII, p. 66 (♀).

*Camponotus meinerti* var. *reginæ* FOREL, 1911, *Rev. Zool. Afr.*, I, p. 282 (♀); 1911, *Sitzb. Bayer. Akad. Wiss.*, p. 291 (♀).

*Camponotus (Orthonotomyrmex) meinerti* subsp. *reginæ* FOREL, 1913, *Rev. Suisse Zool.*, XXI, p. 670 (♀); 1913, *Rev. Zool. Afr.*, II, p. 346 (♀).

*Camponotus meinerti* subsp. *reginæ* BEQUAERT, *ibid.*, p. 431.

*Camponotus (Myrmentoma) meinerti* subsp. *reginæ* FOREL, 1913, *Ann. Soc. Ent. Belgique*, LVII, p. 146 (♀).

Type locality: between the Cubango and Cuito Rivers, MOSSAMEDES (Baum and Van der Kellen).

LIBERIA. CAMEROON: (Conradt); Victoria (Fickendey). BELGIAN CONGO: Shinsenda (J. Bequaert); Kondué (Luja). BENGUELA: (C. Wellman). SOUTHERN RHODESIA: Kandahar Island, Zambesi River (G. Arnold).

#### Subgenus 5. **Myrmotrema** FOREL

*Camponotus* subg. *Myrmotrema* FOREL, 1912, *Mém. Soc. Ent. Belgique*, XX, p. 91; 1914, *Rev. Suisse Zool.*, XXII, p. 262. EMERY, 1920, *Rev. Zool. Afr.*, VIII, 2, p. 245.

Subgenotype: *Camponotus foraminosus* Forel, 1879.

42. **Camponotus (Myrmotrema) aurofasciatus** SANTSCHI, 1915, *Ann. Soc. Ent. France*, LXXXIV, pp. 267 and 276 (♀); 1920, 'Études Maladies Parasites Cacaoyer S. Thomé,' p. 4 (♀).

Type locality: SAN THOMÉ.

43. **Camponotus (Myrmotrema) bayeri** FOREL, 1914, *Rev. Suisse Zool.*, XXII, p. 270. SANTSCHI, 1915, *Ann. Soc. Ent. France*, LXXXIV, p. 271. EMERY, 1920, *Rev. Zool. Afr.*, VIII, 2, p. 258. See p. 252.

*Camponotus bayeri* FOREL, 1913, *Ann. Soc. Ent. Belgique*, LVII, p. 356 (♀).

Type locality: Karemi, BELGIAN CONGO (Bayer).

BELGIAN CONGO: Faradje (Lang and Chapin).

44. **Camponotus (Myrmotrema) bituberculatus** ERN. ANDRÉ. FOREL, 1914, *Rev. Suisse Zool.*, XXII, p. 270. SANTSCHI, 1914, *Boll. Lab. Zool. Gen. Agrar.*

Portici, VIII, p. 381 (♂); 1915, Ann. Soc. Ent. France, LXXXIV, p. 271. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

*Camponotus bituberculatus* ERN. ANDRÉ, 1889, Rev. d'Ent. Caen, VIII, p. 271 (♂); 1890, *ibid.*, IX, p. 311 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 223. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 775.

Type locality: Dakar, SENEGAMBIA (Mocquerys).

SIERRA LEONE: (Mocquerys). FRENCH GUINEA: Kakoulima (F. Silvestri).

45. *Camponotus (Myrmotrema) bottegoi* EMERY. SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 136 (♂, ♀); 1915, Ann. Soc. Ent. France, LXXXIV, p. 270. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

*Camponotus bottegoi* EMERY, 1895, Ann. Mus. Civ. Genova, XXXV, p. 181 (♂, ♀); 1896, Mem. Accad. Sc. Bologna, (5) V, p. 775.

*Camponotus (Myrmoturba) bottegoi* FOREL, 1914, Rev. Suisse Zool., XXII, p. 267.

Type locality: Lower Ganana, SOMALILAND (V. Bottego).

ABYSSINIA: Boran Galla, Middle Ganale (V. Bottego). SOMALILAND: Obbia (Bricchetti-Robecchi). BRITISH EAST AFRICA: Taveta; Voi (Alluaud and Jeannel). GERMAN EAST AFRICA: New Moschi, Mt. Kilimanjaro, 800 m. (Alluaud and Jeannel). ZANZIBAR: Mwera River (C. Alluaud).

46. *Camponotus (Myrmotrema) carbo* EMERY. FOREL, 1914, Rev. Suisse Zool., XXII, p. 270. SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 271. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

*Camponotus carbo* EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 364, fig. (♂). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 223. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 775; 1898, Rend. Accad. Sc. Bologna, N. S., II, p. 227.

Type locality: Scioteil, ERITREA (Beccari).

46i. Var. *occidentalis* MAYR, 1902, Verh. Zool. Bot. Ges. Wien, LII, p. 300 (♂, ♀). SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 271.

Type locality: Akra, GOLD COAST (R. Buchholz).

46a. Subsp. *honorus* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 268 (♂).

*Camponotus (Myrmotrema) foraminosus* subsp. *honorus* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 268.

Type locality: WESTERN ABYSSINIA (Ilg).

46b. Subsp. *osiris* FOREL, 1911, Rev. Zool. Afr., I, p. 281 (♂).

*Camponotus (Myrmotrema) olivieri* subsp. *osiris* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 270.

Type locality: Congo da Lemba, BELGIAN CONGO (R. Mayné).

46c. Subsp. *puberulus* EMERY, 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 604 (♂); 1898, Rend. Accad. Sc. Bologna, N. S., II, p. 227. FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 268 (♂); 1911, Rev. Zool. Afr., I, p. 280; 1913, *ibid.*, II, p. 341 (♂). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 136 (♂).

*Camponotus carbo* var. *puberula* EMERY, 1901, Bull. Soc. Ent. Italiana, XXXIII, p. 63.

*Camponotus (Myrmotrema) puberulus* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, pp. 271 and 278 (♂).

Type locality: Coromma, ABYSSINIA (Ruspoli).

BELGIAN CONGO: Congo da Lemba (R. Mayné); Kwesi to Kilo (Bayer). UGANDA: Unyoro Province, near Lake Albert (C. Alluaud). WESTERN ABYSSINIA: (Ilg). ERITREA: Keren, between Saganeiti and Adi Ugri (Mancini and Ruggeri).



47. **Camponotus (Myrmotrema) compressiscapus** ERN. ANDRÉ. SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 271. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

*Camponotus compressiscapus* ERN. ANDRÉ, 1889, Rev. d'Ent. Caen, VIII, p. 218 (♂); 1890, *ibid.*, IX, p. 312 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 225. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 775.

*Camponotus (Myrmosericus) compressiscapus* FOREL, 1914, Rev. Suisse Zool., XXII, p. 268.

Type locality: SIERRA LEONE (Mocquerys).

48. **Camponotus (Myrmotrema) confluens** FOREL. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

*Camponotus (Myrmamblys) confluens* FOREL, 1913, Rev. Zool. Afr., II, p. 342 (♀); 1914, Rev. Suisse Zool., XXII, p. 271.

*Camponotus confluens* BEQUAERT, 1913, Rev. Zool. Afr., II, p. 431.

Type locality: Welgelegen, BELGIAN CONGO (J. Bequaert).

BELGIAN CONGO: Sankisia (J. Bequaert).

48a. Var. **bequaerti** FOREL, 1913, Rev. Zool. Afr., II, p. 343 (♀, ♀). BEQUAERT, *ibid.*, p. 431.

Type locality: Sankisia, BELGIAN CONGO (J. Bequaert).

48b. Var. **trematogaster** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 266 (♀).

Type locality: Lake Nyanza, Katanga, BELGIAN CONGO (Gérard).

49. **Camponotus (Myrmotrema) crucheti** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 271.

*Camponotus perrisii* subsp. *crucheti* SANTSCHI, 1911, Rev. Zool. Afr., I, p. 215 (♀, ♀, ♂).

Type locality: Cucala, BENGUELA (J. Cruchet).

50. **Camponotus (Myrmotrema) diplopunctatus** EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 22, fig. 12 (♀, ♀). EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

Type locality: Nefasit, ERITREA (F. Silvestri).

ERITREA: Mayabal (F. Silvestri).

51. **Camponotus (Myrmotrema) foraminosus** FOREL, 1914, Rev. Suisse Zool., XXII, p. 270; 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 350; 1916, Rev. Suisse Zool., XXIV, p. 443 (♀, ♀). SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, pp. 268 and 272. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258. See pp. 249 and 1050.

*Camponotus niveosetosus* EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 364 (♀, ♀) (*nec* Mayr). MAGRETTI, 1884, *ibid.*, XXI, p. 537; 1884, Bull. Soc. Ent. Italiana, XV, (1883), p. 244 (♀, ♀) (*nec* Mayr).

*Camponotus foraminosus* FOREL, 1879, Bull. Soc. Vaudoise Sc. Nat., (2) XVI, p. 87 (♀); 1886, Ann. Soc. Ent. Belgique, XXX, p. 174 (♀). EMERY, 1886, Bull. Soc. Ent. Italiana, XVIII, p. 358. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 231. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 774. SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 393 (♀). H. KOHL, 1909, Natur u. Offenbarung, LV, p. 102. STRTZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 149 (♀, ♀). FOREL, 1911, Sitzb. Bayer. Akad. Wiss., p. 291 (♀); 1913, Rev. Suisse Zool., XXI, p. 671 (♀).

Type locality: Cape Verde, SENEGAMBIA.

SOUTHERN NIGERIA: Old Calabar (Bates). CAMEROON: (Conradt). FRENCH CONGO: Brazzaville (A. Weiss). BELGIAN CONGO: Kimpoko (Büttner); St. Gabriel (Kohl); Faradje; Avakubi; Stanleyville; Bengamisa (Lang and Chapin). ANGLO-EGYPTIAN SUDAN: Sebderat (Magretti). ERITREA: Keren (Beccari); Kor Lebka (Magretti). CAPE PROVINCE: Cape of Good Hope (L. Péringuey).

51a. Subsp. **auropubens** FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 67 (♀). EMERY, 1895, Ann. Mus. Civ. Genova, XXXV, p. 182 (♀); 1896, *ibid.*, XXXVII, p. 159 (♀); 1896, Mem. Accad. Sc. Bologna, (5) V, p. 774; 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 604 (♀, ♀). FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 90. SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 41 (♀). See p. 250.

*Camponotus grandidierei* subsp. *auropubens* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 150 (♀).

*Camponotus (Myrmotrema) auropubens* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, pp. 267, 272, and 275.

Type locality: Delagoa Bay, PORTUGUESE EAST AFRICA (Liengme).

SOMALILAND: Magala Re Umberto (Ruspoli); Lugh; Lower Ganale (V. Bottego). ABYSSINIA: Boran Galla, Middle Ganale (V. Bottego); Daua (Ruspoli). NATAL: Stamford Hill (I. Trägårdh). BELGIAN CONGO: Stanleyville (Lang and Chapin).

51a<sub>1</sub>. Var. **absolon** (SANTSCHI):

*Camponotus (Myrmotrema) auropubens* var. *absolon* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, pp. 267 and 274 (♀, ♀).

Type locality: NATAL (I. Trägårdh).

51a<sub>2</sub>. Var. **argentopubens** FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 66 (♀).

*Camponotus (Myrmotrema) auropubens* subsp. *argentopubens* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 268.

Type locality: BENGUELA (C. Wellman).

51a<sub>3</sub>. Var. **jacob** (SANTSCHI).

*Camponotus (Myrmotrema) auropubens* var. *jacob* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, pp. 267 and 275 (♀).

Type locality: Pongué Valley, Guengera, MOZAMBIQUE (G. Vasse).

RHODESIA: Bulawayo (G. Arnold).

51b. Subsp. **benguelensis** SANTSCHI, 1911, Rev. Zool. Afr., I, p. 213 (♀, ♀, ♂); 1915, Ann. Soc. Ent. France, LXXXIV, p. 269.

Type locality: Cucala, BENGUELA (J. Cruchet).

51c. Subsp. **chrysogaster** EMERY, 1895, Ann. Mus. Civ. Genova, XXXV, p. 182 (♀); 1896, Mem. Accad. Sc. Bologna, (5) V, p. 774; 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 604. FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 31; in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 90 (♀, ♂). MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 21 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 136 (♀); 1915, Ann. Soc. Ent. France, LXXXIV, p. 268.

*Camponotus chrysogaster* EMERY, 1899, Ann. Mus. Civ. Genova, XXXIX, p. 501 (♀).

Type locality: Arussi Galla, Ganale Gudda, ABYSSINIA (V. Bottego).

ABYSSINIA: Buditu to Dimé (V. Bottego). SOMALILAND: Magala Re Umberto (Ruspoli). BRITISH EAST AFRICA: Blue Post Hotel, Kikuyu, 1520 m. (Alluaud and

Jeannel); Fundu Island, W. Pemba (Voeltzkow). GERMAN EAST AFRICA: New Moschi, Mt. Kilimanjaro, 800 m. (Alluaud and Jeannel); Kibonoto, Kilimanjaro; Ngare-na-Nyuki, Meru (Sjöstedt); Mto-ya-Kifaru (Katona). UGANDA: region of Lake Albert, southern Unyoro (C. Alluaud).

51c. Var. **annobonensis** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, pp. 268 and 277 (♀).

*Camponotus (Myrmotrema) foraminosus* var. *annobonensis* SANTSCHI, 1920, 'Études Maladies Parasites Cacaoyer S. Thomé,' X, p. 4.

*Camponotus (Myrmotrema) perrisi* var. *insularis* STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. (1910-11),' I, p. 399, fig. 12 (♀, ♀, ♂).

Type locality: ANNOBON (Reichensperger; Schultze).

51d. Subsp. **cuitensis** FOREL, 1901, Mitth. Schweiz. Ent. Ges., X, p. 309 (♀); in Baum, 1903, 'Kunene-Sambesi Expedition,' p. 563 (♀).

*Camponotus (Myrmotrema) robbechii* subsp. *troglodytes* var. *cuitensis* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 271.

Type locality: Between the Cubango and Cuito Rivers, MOSSAMEDES (Baum and Van der Kellen).

51e. Subsp. **delagoensis** FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 68 (♀). EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 774.

*Camponotus (Myrmotrema) olivieri* var. *delagoensis* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 270.

Type locality: Delagoa Bay, PORTUGUESE EAST AFRICA (P. Berthoud; Liengme).

51f. Subsp. **flavus** STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 397, fig. 11 (♀).

Type locality: Fort Crampel, FRENCH CONGO (Schubotz).

51g. Subsp. **hæreticus** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 382 (♀). See p. 250.

*Camponotus (Myrmotrema) hæreticus* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 269.

Type locality: Olokemeji, SOUTHERN NIGERIA (F. Silvestri).

GOLD COAST: Aburi (F. Silvestri). BELGIAN CONGO: Lukolela (Lang and Chapin).

51h. Subsp. **lemma** FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 176 (♀, ♀). EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 774. H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 36. FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 357 (♀).

*Camponotus lemma* DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 238.

*Camponotus (Myrmotrema) olivieri* var. *lemma* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 270.

Type locality: Malange, ANGOLA (M. Buchner).

BELGIAN CONGO: Lukula (Daniel); Banza Masola; Mondombe; Ganda Sundi; Congo da Lemba (R. Mayné). ZANZIBAR: (Hildebrandt).

51h. Var. **infelix** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 254 (♀).

*Camponotus (Myrmotrema) olivieri* subsp. *infelix* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 270.

Type locality: Durban, NATAL (G. Arnold).

51h<sub>2</sub>. Var. **moshianus** FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 31 (♀).  
*Camponotus (Myrmotrema) olivieri* var. *moshiana* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 270.

Type locality: Moschi, GERMAN EAST AFRICA (Katona).

51i. Subsp. **orthodoxus** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 381 (♀).

*Camponotus (Myrmotrema) orthodoxus* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 267.

Type locality: Kindia, FRENCH GUINEA (F. Silvestri).

51j. Subsp. **ruspolii** FOREL, 1892, Mitth. Schweiz. Ent. Ges., VIII, p. 349 (♀). EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 774. FOREL, 1914, Rev. Suisse Zool., XXII, p. 270. See p. 1050.

*Camponotus ruspolii* DALLA TORRE, 1893, 'Cat. Hym.', VII, p. 250.

*Camponotus (Myrmotrema) grandidieri* subsp. *ruspolii* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 269.

*Camponotus (Myrmotrema) ruspolii* EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

Type locality: SOMALILAND (C. Keller).

51j<sub>1</sub>. Var. **rollei** FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 270 (♀); 1913, Rev. Zool. Afr., II, p. 341 (♀). BEQUAERT, *ibid.*, p. 430.

*Camponotus (Myrmotrema) grandidieri* subsp. *ruspolii* var. *rollei* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 269.

Type locality: Zoutpansberg, 800 m., northern TRANSVAAL (Rolle).

BELGIAN CONGO: Sankisia (J. Bequaert).

52. **Camponotus (Myrmotrema) galla** FOREL. SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 267. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

*Camponotus galla* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 68 (♀). EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 775; 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 604; 1899, *ibid.*, XXXIX, p. 501 (♀). MAYR, in Jägerskiöld, 1903, 'Exped., IX, Formicid.', p. 11; 1907, Sitzb. Ak. Wiss. Wien, math. naturw. Kl., CXVI, Abt. 1, p. 389. FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 372.

*Camponotus foraminosus* subsp. *latinotus* FOREL, 1907, Rev. d'Ent. Caen, XXVI, p. 144 (♀).

*Camponotus erinaceus* subsp. *galla* FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 271. KARAWAIEW, 1911, Rev. Russe Ent., XI, p. 12 (♀). EMERY, 1915, Boll. Lab. Zool. Gen. Agrar. Portici, X, p. 4 (♀).

*Camponotus (Orthonotomyrmex) galla* FOREL, 1914, Rev. Suisse Zool., XXII, p. 273.

Type locality: SOUTHERN ABYSSINIA (Ilg).

ERITREA: Nefasit (K. Escherich); Mayabal (F. Silvestri). ABYSSINIA: Hauacio (Ruspoli); Upper Aouache-Endessa (de Rothschild); Bass Narok (V. Bottego). ANGLO-EGYPTIAN SUDAN: Kaka, White Nile (I. Trägårdh); Renk (F. Werner); Khartum; Port Sudan (Karawaiew). BRITISH EAST AFRICA: Lake Rudolf (de Rothschild).

53. **Camponotus (Myrmotrema) grandidieri** FOREL, 1914, Rev. Suisse Zool., XXII, p. 270. SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, pp. 268 and 272. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258. See p. 1050.

*Camponotus grandidieri* FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, C. R., p. ciii (♀). DISTANT, 1892, 'A Naturalist in the Transvaal,' p. 211. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 70. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 150. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 775. MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 21.

*Camponotus foraminosus* subsp. *grandidieri* FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 89 (♀, ♀, ♂); 1913, Ann. Soc. Ent. Belgique, LVII, p. 145 (♀, ♂).

*Camponotus foraminosus* var. *grandidieri* (?) MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 195 (♀). H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 37.

GERMAN EAST AFRICA: Ngare na Nyuki, Meru (Sjöstedt). BRITISH EAST AFRICA: Fundu Island, W. Pemba (Voeltzkow). RHODESIA: Bulawayo (G. Arnold). PORTUGUESE EAST AFRICA: Quilimane (Stuhlmann); Mozambique Island (H. Brauns); Delagoa (Liengme). TRANSVAAL: Pretoria (Distant).

53i. Var. *atrabilis* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, pp. 269 and 273 (♀). See p. 1051.

MOZAMBIQUE: Gorongoza (G. Vasse).

53a. Subsp. *mendax* (EMERY) SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, pp. 269 and 274 (♀).

*Camponotus foraminosus* subsp. *mendax* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 54 (♀); 1896, Mem. Accad. Sc. Bologna, (5) V, p. 774. FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 30 (♀, ♀).

Type locality: Hamman's Kraal, TRANSVAAL (E. Simon).

NATAL. CAPE PROVINCE: (Krebs). BECHUANALAND: Khakhea to Kang (L. Schultze). GERMAN SOUTHWEST AFRICA: (Lübbert).

54. *Camponotus (Myrmotrema) ilgi* FOREL, 1914, Rev. Suisse Zool., XXII, p. 270. SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 270. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

*Camponotus ilgi* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 64 (♀). EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 775. SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 314 (♀).

Type locality: SOUTHERN ABYSSINIA (Ilg).

SENEGAMBIA: St. Louis (Claveau).

55. *Camponotus (Myrmotrema) micipsa* WM. M. WHEELER. See p. 252 (♀).

Type locality: Between Leopoldville and Yumbi, BELGIAN CONGO (Lang and Chapin).

56. *Camponotus (Myrmotrema) olivieri* (FOREL) SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, pp. 270 and 272. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

*Camponotus foraminosus* subsp. *olivieri* FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 175 (♀, ♀). MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 150. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 774. SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 393. FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 356 (♀).

*Camponotus olivieri* DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 246.

Type locality: Malange, ANGOLA (M. Buchner).

GOLD COAST: Akra. FRENCH CONGO: Gaboon (H. Brauns); Brazzaville (A. Weiss). BELGIAN CONGO: Congo da Lemba (R. Mayné).

56i. Var. **sorptus** (FOREL) SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 270. See p. 252.

*Camponotus foraminosus* subsp. *delagoensis* var. *sorpta* FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 62 (♀, ♀, ♂).

Type locality: Lower CONGO, in stomach of *Manis temmincki* (Solon).

BELGIAN CONGO: Kwamouth; Leopoldville; Lukolela; Stanleyville (Lang and Chapin).

56z. Var. **tenuipilis** (EMERY) SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 270.

*Camponotus foraminosus* subsp. *olivieri* var. *tenuipilis* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 54 (♀).

Type locality: Pretoria, TRANSVAAL (E. Simon).

56a. Subsp. **concordia** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, pp. 269 and 272 (♀).

Type locality: Cucala, BENGUELA (J. Cruchet).

56b. Subsp. **tauricollis** (FOREL) SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 270.

*Camponotus foraminosus* subsp. *tauricollis* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 68 (♀). EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 774.

Type locality: Delagoa Bay, PORTUGUESE EAST AFRICA (Liengme).

56b<sub>1</sub>. Var. **pax** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, pp. 270 and 273 (♀).

Type locality: CAMEROON.

57. **Camponotus (Myrmotrema) perrisi** FOREL, 1914, Rev. Suisse Zool., XXII, p. 270. SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 272. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

*Camponotus foraminosus* subsp. *perrisi* FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 177 (♀, ♀). H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 36.

*Camponotus perrisi* DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 247.

*Camponotus perrisi* EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 775.

*Camponotus foraminosus* subsp. *perrini* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 393 (♀).

Type locality: Malange, ANGOLA (M. Buchner).

FRENCH CONGO: (A. Weiss). BRITISH EAST AFRICA: Kitui (Hildebrandt).

57i. Var. **densipunctatus** STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 399 (♀, ♂).

Type locality: Duma, BELGIAN CONGO (Schubotz).

FRENCH CONGO: Fort Crampel; Fort de Possel to Fort Crampel (Schubotz).

57a. Subsp. **jucundus** SANTSCHI, 1911, Rev. Zool. Afr., I, p. 216 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 314; 1915, Ann. Soc. Ent. France, LXXXIV, p. 272. See p. 251.

*Camponotus (Myrmotrema) perrisi* subsp. *jucundus* STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 399 (♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

FRENCH CONGO: Mandouga (A. Weiss). BELGIAN CONGO: Ubangi; Banzyville (Augustin); Garamba; Faradje; Niangara; Kwamouth (Lang and Chapin); Kimuenza (Schultze).

57a<sub>1</sub>. Var. **grandior** (FOREL) SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 272. See p. 252.

*Camponotus (Myrmotrema) foraminosus* subsp. *perrisii* var. *grandior* FOREL, 1913, Rev. Zool. Afr., II, p. 342 (♀).

*Camponotus foraminosus* subsp. *perrisii* var. *grandis* BEQUAERT, 1913, ibid., II, p. 431.

Type locality: Welgelegen, BELGIAN CONGO (J. Bequaert).

BELGIAN CONGO: Yakuluku; Garamba (Lang and Chapin).

57b. Subsp. **nigeriensis** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, pp. 272 and 277 (♀, ♀, ♂).

*Camponotus (Myrmotrema) bayeri* subsp. *nigeriensis* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 383 (♀).

Type locality: Ibadan, SOUTHERN NIGERIA (F. Silvestri).

SOUTHERN NIGERIA: Lagos (F. Silvestri). BELGIAN CONGO: Kitempuka; Katakai (Gérard).

58. **Camponotus (Myrmotrema) postoculatus** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 254 (♀).

Type locality: Durban, NATAL (G. Arnold).

59. **Camponotus (Myrmotrema) rhamses** SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, pp. 268 and 275 (♀).

Type locality: Lake No, Upper EGYPT (Reichensperger).

60. **Camponotus (Myrmotrema) robecchii** EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

*Camponotus robecchii* EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 120, fig. (♀). DALLA TORRE, 1893, 'Cat. Hym.', VII, p. 250. EMERY, 1896, Mem. Accad. Sc. Bologna, (V) 5, p. 774; 1901, Bull. Soc. Ent. Italiana, XXXIII, p. 63 (♀).

*Camponotus foraminosus* subsp. *robecchii* FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 90 (♀).

*Camponotus (Myrmotrema) foraminosus* subsp. *robecchii* FOREL, 1914, Rev. Suisse Zool., XXII, p. 270.

*Camponotus (Myrmotrema) robbechii* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, pp. 271 and 272.

Type locality: Obbia, SOMALILAND (Bricchetti-Robecchi).

BRITISH EAST AFRICA: Chake-Chake, Pemba (Voeltzkow). ERITREA: Massaua (Belli).

61. **Camponotus (Myrmotrema) troglodytes** FOREL, 1914, Rev. Suisse Zool., XXII, p. 270; 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 254 (♀). SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 40 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 137 (♀). EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

*Camponotus troglodytes* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 69 (♀). EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 775. FOREL, 1904, Ann. Mus. Zool. Ac. Sc. St. Pétersbourg, VIII, (1903), p. 377 (♀); in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 29 (♀).

*Camponotus (Myrmotrema) robbechii* subsp. *troglodytes* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 271.

Type locality: Delagca Bay, PORTUGUESE EAST AFRICA (Liengme).

GERMAN SOUTHWEST AFRICA: (Lübbert). BECHUANALAND: Khakhea to Kang (L. Schultze); Gröotfontein (v. Erffer). TRANSVAAL: Lydenburg (Wilms). CAPE

PROVINCE: Cape Town (Wilms). ZULULAND: Dukudu (I. Trägårdh). NATAL: Durban (G. Arnold). BRITISH EAST AFRICA: Ramisi River (Alluaud and Jeannel). ABYSSINIA: Southern Danakil; Harar (Kachovskij).

61<sub>1</sub>. Var. **abyssinicus** SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 314 (♀).

*Camponotus (Myrmotrema) robbeckii* subsp. *trogodytes* var. *abyssinica* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 271.

Type locality: Diré Daa, ABYSSINIA (J. Roger).

61<sub>2</sub>. Var. **rhodesianus** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 145 (♀).

*Camponotus (Myrmotrema) robbeckii* subsp. *rhodesiana* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 271.

Type locality: Redbank, SOUTHERN RHODESIA (G. Arnold).

SOUTHERN RHODESIA: Sebakwe (G. Arnold).

#### Subgenus 6. **Myrmopiromis** WHEELER

*Camponotus* subg. *Myrmopiromis* WHEELER, 1921, Psyche, XXVIII, p. 17.

*Camponotus* subg. *Myrmepomis* EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 245 (not of Forel, 1912).

Subgenotype: *Formica fulvopilosa* De Geer, 1778.

62. **Camponotus (Myrmopiromis) conradti** FOREL.

*Camponotus (Camponotus) conradti* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 256 (♀).

*Camponotus (Myrmopomis) conradti* EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

Type locality: CAMEROON (Conradt).

63. **Camponotus (Myrmopiromis) fulvopilosus** (DE GEER).

*Formica fulvopilosa* DEGEER, 1778, 'Mém. Hist. Ins.,' VII, p. 613, Pl. XLV, figs. 13, 14. GÖTZE, in DeGeer, 1783, 'Abh. Gesch. Insekt.,' VII, p. 218 (♀), Pl. XLV, figs. 13, 14. RETZIUS, 1783, 'Gen. et Spec. Insect.,' p. 75. LEPELETIER, 1836, 'Hist. Nat. Ins. Hym.,' I, p. 213. F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 32.

*Formica pilosa* OLIVIER, 1791, 'Encycl. Méthod. Insect.,' VI, p. 498.

*Formica rufiventris* FABRICIUS, 1804, 'Syst. Piez.,' p. 409 (♀).

*Camponotus fulvopilosus* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 668 (♀); 1863, ibid., XIII, p. 399. ROGER, 1863, 'Verzeich. Formicid.,' p. 2. MAYR, 1865, 'Reise Novara, Zool.,' II, Formicidæ, p. 36. FOREL, 1879, Bull. Soc. Vaudoise Sc. Nat., (2) XVI, p. 108 (♀); 1886, Ann. Soc. Ent. Belgique, XXX, p. 192 (♀). EMERY, 1886, Bull. Soc. Ent. Italiana, XVIII, p. 356 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 232. EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 54. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 150. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 774; 1900, Bull. Soc. Ent. Italiana, XXXII, p. 117, fig. 12 (♀). BINGHAM, 1903, Ann. Mag. Nat. Hist., (7) XII, p. 63 (♀). DIXEY and LONGSTAFF, 1907, Trans. Ent. Soc. London, pp. 349 and 363. FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 25 (♀, ♂).

*Camponotus (Myrmepomis) fulvopilosus* FOREL, 1914, Rev. Suisse Zool., XXXII, p. 273. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

Type locality: Cape of Good Hope.



CAPE PROVINCE: Kimberley (E. Simon); Tulbagh. BASUTOLAND: Lessouto (P. Berthoud). GERMAN SOUTHWEST AFRICA: (Lübbert); Okahandja (Casper; Peters); Grootfontein (v. Erffer); Windhoek (Kunze and L. Schultze); Bethanien (Schenck); Salem (L. Schultze). PORTUGUESE CONGO: Chinchoxo (Falkenstein). BENGUELA. RHODESIA: Victoria Falls; Tsessebe Station (Dixey and Longstaff).

63<sub>1</sub>. Var. **detritoides** FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 25 (♀).

Type locality: Glatkop, Little Namaland, CAPE PROVINCE (L. Schultze).

63<sub>2</sub>. Var. **flavopilosus** EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 54 (♀); 1896, Mem. Accad. Sc. Bologna, (5) V, p. 774. FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 25 (♀, ♂); 1911, Sitzb. Bayer. Akad. Wiss., p. 291 (♀). EMERY, 1912, Annuar. Mus. Zool. Univ. Napoli, N. S., III, No. 26, p. 2 (♀).

Type locality: De Aar, CAPE PROVINCE (E. Simon).

GERMAN SOUTHWEST AFRICA: (G. v. Bayern); Salem; Kubub (L. Schultze). CAPE PROVINCE: Namaland (L. Péringuey). BECHUANALAND: Kooa (L. Schultze). BELGIAN CONGO: Luapula River.

63<sub>a</sub>. Subsp. **brevisetosus** FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 25 (♀, ♀).

Type locality: NATAL (Haviland).

CAPE PROVINCE: Cape Town (Wilms).

63<sub>b</sub>. Subsp. **detritus** (EMERY) FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 26 (♀).

*Camponotus detritus* EMERY, 1886, Bull. Soc. Ent. Italiana, XVIII, p. 357 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 228. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 774.

*Camponotus (Myrmepomis) detritus* EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

Type locality: Damaraland, GERMAN SOUTHWEST AFRICA.

GERMAN SOUTHWEST AFRICA: Rooibank near the Walfish Bay (L. Schultze).

63<sub>c</sub>. Subsp. **storeatus** FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 26 (♀).

Type locality: Willowmore, CAPE PROVINCE (H. Brauns).

64. **Camponotus (Myrmopiromis) maynei** FOREL.

*Camponotus (Orthonotomyrmex) maynei* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 445 (♀, ♀).

*Camponotus (Myrmepomis) maynei* EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

Type locality: BELGIAN CONGO (R. Mayné).

65. **Camponotus (Myrmopiromis) niveosetosus** MAYR. See p. 1052.

*Camponotus niveosetosus* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 665 (♀); 1863, ibid., XIII, p. 400. ROGER, 1863, 'Verzeich. Formicid.,' p. 2. MAYR, 1865, 'Reise Novara, Zool.,' II, Formicidæ, p. 35 (♀, ♀), Pl. I, fig. 3; 1866, Verh. Zool. Bot. Ges. Wien, XVI, p. 885 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 245. EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 55; 1896, Mem. Accad. Sc. Bologna, (5) V, p. 775. FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 89 (♀); in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 30 (♀).

*Camponotus (Myrmoturba) niveosetosus* FOREL, 1914, Rev. Suisse Zool., XXII, p. 267.

*Camponotus (Myrmepomis) niveosetosus* EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

Type locality: Cape of Good Hope (Novara Expedition).

CAPE PROVINCE: Cape Town (E. Simon). BECHUANALAND: Lehututu (L. Schultze). GERMAN SOUTHWEST AFRICA: (L. Schultze). BRITISH EAST AFRICA: Fundu Island, W. Pemba (Voeltzkow).

65a. Subsp. **irreduz** FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 30 (♀); 1910, Ann. Soc. Ent. Belgique, LIV, p. 451.

*Camponotus (Myrmoturba) niveosetosus* var. *irreduz* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 41 (♀).

Type locality: NATAL (R. C. Wroughton).

NATAL: (Haviland); Pietermaritzburg (I. Trägårdh).

### Subgenus 7. **Myrmorhachis** FOREL

*Camponotus* subg. *Myrmorhachis* FOREL, 1912, Mém. Soc. Ent. Belgique, XX, p. 92.

*Camponotus* subg. *Myrmacantha* EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 246.

Subgenotype: *Camponotus polyrhachioides* Emery, 1898.

66. **Camponotus (Myrmorhachis) aberrans** MAYR. FOREL, 1914, Rev. Suisse Zool., XXII, p. 274. SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 264 (♀).

*Camponotus aberrans* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 152 (♀). EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 774. SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 393 (♀).

*Camponotus (Myrmacantha) aberrans* EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

Type locality: GOLD COAST.

FRENCH CONGO: Brazzaville (A. Weiss). BELGIAN CONGO: Kitempuka (Gérard).

67. **Camponotus (Myrmorhachis) polyrhachioides** EMERY. FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 357 (♀); 1914, Rev. Suisse Zool., XXII, p. 274. See p. 254.

*Polyrhachis paradoxa* ERN. ANDRÉ, 1892, Rev. d'Ent. Caen, XI, p. 46 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 266. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 153. ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 1 (♀). EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 778.

*Camponotus polyrhachioides* EMERY, 1898, Rend. Accad. Sc. Bologna, N. S., II, p. 227; 1900, Bull. Soc. Ent. Italiana, XXXII, p. 117, fig. 11a (♀). FOREL, 1901, Mitt. Naturh. Mus. Hamburg, XVIII, p. 74 (♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 393 (♀).

*Camponotus paradoxus* STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 149 (♀, ♀) (nec *Camponotus paradoxus* Mayr, 1866).

*Camponotus (Myrmacantha) polyrhachioides* EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

Type locality: Gaboon, FRENCH CONGO.

SIERRA LEONE. LIBERIA: Grand Bassa (H. Brauns). CAMEROON: Mundame (Conradt); Longji (Paschen). FRENCH CONGO: Ogowé (Mocquerys); Sette-Cama (Hupfer); Brazzaville (A. Weiss). BELGIAN CONGO: Mayombe; Kiniati (R. Mayné); Lie; Lukolela (Lang and Chapin).

Subgenus 8. **Myrmopsamma** FOREL

*Camponotus* subg. *Myrmopsamma* FOREL, 1914, Rev. Suisse Zool., XXII, p. 261.  
EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 246.

Subgenotype: *Camponotus mystaceus* Emery, 1886.

68. ***Camponotus (Myrmopsamma) cuneiscapus*** FOREL, 1914, Rev. Suisse Zool., XXII, p. 270. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

*Camponotus cuneiscapus* FOREL, in Schultze, 1910, 'Forschungsreise in Süd-afrika,' IV, p. 29 (♀), Pl. I, fig. 2.

Type locality: Steinkopf, CAPE PROVINCE (L. Schultze).

69. ***Camponotus (Myrmopsamma) mystaceus*** EMERY. FOREL, 1914, Rev. Suisse Zool., XXII, p. 270. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

*Camponotus mystaceus* EMERY, 1886, Bull. Soc. Ent. Italiana, XVIII, p. 356 (♀, ♂), Pl. XVII, fig. 3. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 244. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 768. FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 27 (♀).

Type locality: Cape of Good Hope (L. Péringuey).

GERMAN SOUTHWEST AFRICA: Okahandja (Casper); Windhoek (L. Schultze). BECHUANALAND: Severelela to Khakhea; Kang to Lehututu; Kooa to Sekgoma (L. Schultze).

69<sub>1</sub>. Var. ***exsanguis*** FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 28 (♀, ♀, ♂).

Type locality: Prince of Wales Bay, South of Lüderitzbucht, GERMAN SOUTHWEST AFRICA (L. Schultze).

CAPE PROVINCE: Steinkopf (L. Schultze).

69<sub>2</sub>. Var. ***kamæ*** FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 27 (♀).

Type locality: Rooibank, near Walfish Bay, GERMAN SOUTHWEST AFRICA (L. Schultze).

70. ***Camponotus (Myrmopsamma) simulans*** FOREL, 1914, Rev. Suisse Zool., XXII, p. 270. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

*Camponotus simulans* FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 28 (♀), Pl. I, fig. 4.

Type locality: Prince of Wales Bay, south of Lüderitzbucht, GERMAN SOUTHWEST AFRICA (L. Schultze).

Subgenus 9. **Myrmamblys** FOREL

*Camponotus* subg. *Myrmamblys* FOREL, 1912, Mém. Soc. Ent. Belgique, XX, p. 90.

*Camponotus* subg. *Myrmotennus* EMERY, 1920, (in part), Rev. Zool. Afr., VIII, p. 246.

Subgenotype: *Camponotus reticulatus* Roger, 1863.

71. ***Camponotus (Myrmamblys) bedoti*** EMERY.

*Camponotus bedoti* EMERY, 1893, Rev. Suisse Zool., I, p. 196 (♀), Pl. VIII, fig. 2.

Type locality: Batjan, MOLUCCAS (Bedot).

MALAYSIA.

71. Var. **klugi** EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 51 (♀).

*Camponotus reticulatus* subsp. *yerburyi* var. *klugi* EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 772.

Type locality: Cape Town, CAPE PROVINCE (E. Simon).

72. **Camponotus (Myrmamblys) bertolonii** EMERY.

*Camponotus bertolonii* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 51 (♀, ♀); 1896, Mem. Accad. Sc. Bologna, (5) V, p. 771. MAYR, 1901, Ann. Naturh. Hofmus. Wien, XVI, p. 28 (♀, ♀, ♂).

*Camponotus (Myrmoturba) bertolonii* FOREL, 1914, Rev. Suisse Zool., XXII, p. 267.

*Camponotus (Myrmotemnus) bertolonii* EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

Type locality: Cape Town, CAPE PROVINCE (E. Simon).

CAPE PROVINCE: Port Elizabeth (H. Brauns).

73. **Camponotus (Myrmamblys) brookei** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 259 (♀).

Type locality: Stella Bush, Durban, NATAL (Marley).

74. **Camponotus (Myrmamblys) chapini** Wm. M. WHEELER. See p. 254 (♀).

Type locality: Garamba, BELGIAN CONGO (Lang and Chapin).

BELGIAN CONGO: Medje; Faradje (Lang and Chapin).

75. **Camponotus (Myrmamblys) emarginatus** EMERY.

*Camponotus emarginatus* EMERY, 1886, Bull. Soc. Ent. Italiana, XVIII, p. 358 (♀, ♀, ♂), Pl. XVII, fig. 2. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 229. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 771.

*Camponotus (Myrmophyma) emarginatus* FOREL, 1914, Rev. Suisse Zool., XXII, p. 269.

*Camponotus (Myrmotemnus) emarginatus* EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

Type locality: Cape of Good Hope, CAPE PROVINCE (L. Péringuey).

76. **Camponotus (Myrmamblys) ferrerii** FOREL, 1914, Rev. Suisse Zool., XXII, p. 271.

*Camponotus ferrerii* FOREL, 1913, *ibid.*, XXI, p. 671 (♀).

Type locality: CAMEROON (Conradt).

76a. Subsp. **akka** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 446 (♀, ♀).

Type locality: BELGIAN CONGO (Kohl).

77. **Camponotus (Myrmamblys) limbiventris** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 134 (♀).

*Camponotus limbiventris* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXIX, p. 366, fig. (♀).

*Camponotus (?Myrmotemnus) limbiventris* EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

Type locality: Kibosho, Mt. Kilimanjaro, GERMAN EAST AFRICA (C. Alluaud). BRITISH EAST AFRICA: Amboni River, Mt. Kenia, 1800 m. (Alluaud and Jeannel).

78. **Camponotus (Myrmamblys) nasutus** EMERY.

*Camponotus nasutus* EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 53 (♀), Pl. II, fig. 27; 1896, Mem. Accad. Sc. Bologna, (5) V, p. 771.

*Camponotus (Myrmophyma) nasutus* FOREL, 1914, Rev. Suisse Zool., XXII, p. 269.

*Camponotus (Myrmotemnus) nasutus* EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.  
Type locality: Pretoria, TRANSVAAL (E. Simon).

78i. Var. *quinque-dentatus* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 451 (♀).

Type locality: NATAL (Haviland).

79. *Camponotus (Myrmamblys) orinobates* SANTSCHI, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 348, fig. 4c (♀).

*Camponotus (Myrmamblys) bertolonii* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 134 (♀) (nec Emery).

Type locality: eastern slope of Mt. Kenia, BRITISH EAST AFRICA (Alluaud and Jeannel).

BRITISH EAST AFRICA: River Amboni, 1800 m.; Kijabe, Kikuyu Escarpment, 2100 m. (Alluaud and Jeannel).

80. *Camponotus (Myrmamblys) schoutedeni* FOREL.

*Camponotus schoutedeni* FOREL, 1911, Rev. Zool. Afr., I, p. 281 (♀); 1912, Ent. Mitt. Deutsch. Ent. Mus. Berlin, I, p. 83; 1913, Ann. Soc. Ent. Belgique, LVII, pp. 146 (♀) and 357 (♀).

*Camponotus (Myrmosaga) schoutedeni* FOREL, 1913, Rev. Zool. Afr., II, p. 347 (♀); 1914, Rev. Suisse Zool., XXII, p. 269. SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 137 (♀).

Type locality: Congo da Lemba, BELGIAN CONGO (R. Mayné).

BELGIAN CONGO: Banza Masola; Yandumba; Ganda Sundi; Mandungu; Yambata; Kiniati (R. Mayné); Beni (Borgerhoff). BENGUELA: (C. Wellman). RHODESIA: Redbank (G. Arnold). GERMAN EAST AFRICA: New Moschi, Mt. Kilimanjaro, 800 m. (Alluaud and Jeannel). BRITISH EAST AFRICA: Likoni; Shimoni; Kikuyu Escarpment (Alluaud and Jeannel).

81. *Camponotus (Myrmamblys) simus* EMERY. FOREL, 1914, Rev. Suisse Zool., XXII, p. 272.

*Camponotus simus* EMERY, 1908, Ann. Soc. Ent. Belgique, LII, p. 188, fig. 2 (♂, ♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 393 (♀).

*Camponotus (Myrmotemnus) simus* EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

Type locality: Sankuru, BELGIAN CONGO (Luja).

FRENCH CONGO: Brazzaville (A. Weiss).

81a. Subsp. *manidis* FOREL, 1911, Rev. Zool. Afr., I, p. 282 (♀).

*Camponotus manidis* FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 62 (♀).

Type locality: Lower CONGO, in stomach of *Manis temmincki* (Solon).

82. *Camponotus (Myrmamblys) viri* SANTSCHI, 1915, Ann. Soc. Ent. France, LXXXIV, p. 265, fig. 13 (♀).

*Camponotus (Myrmotemnus) viri* EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 258.

Type locality: Mombasa, BRITISH EAST AFRICA.

#### Subgenus 10. *Colobopsis* MAYR

*Colobopsis* MAYR, 1861, 'Europ. Formicid.,' p. 38.

*Camponotus* subg. *Colobopsis* EMERY, 1889, Ann. Mus. Civ. Genova, XXVII, p. 517. FOREL, 1912, Mém. Soc. Ent. Belgique, XX, p. 90; 1914, Rev. Suisse Zool., XXII, p. 263. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 247.

Subgenotype: *Formica truncata* Spinola, 1808.

83. **Camponotus (Colobopsis) bifossus** SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), p. 293 (♀).

Type locality: Caledon, CAPE PROVINCE (L. Péringuey).

*Species Incertæ Sedis*

84. **Camponotus æquitas** SANTSCHI.<sup>1</sup>

*Camponotus (Myrmamblys) æquitas* SANTSCHI, 1920, Ann. Soc. Ent. France, LXXXVIII, (1919), p. 387, fig. 16 (♀, ♀, ♂).

Type locality: Bulawayo, RHODESIA (G. Arnold).

85. **Camponotus berthoudi** FOREL, 1879, Bull. Soc. Vaudoise Sc. Nat., (2) XVI, p. 108 (♀), Pl. I, fig. 6. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 222. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 774.

*Camponotus (Myrmamblys) berthoudi* FOREL, 1914, Rev. Suisse Zool., XXII, p. 271.

Type locality: Valdezia, TRANSVAAL (P. Berthoud).

86. **Camponotus buchholzi** MAYR, 1902, Verh. Zool. Bot. Ges. Wien, LII, p. 297 (♀, ♀).

*Camponotus (Myrmamblys) buchholzi* FOREL, 1914, Rev. Suisse Zool., XXII, p. 271.

Type locality: Victoria, CAMEROON (R. Buchholz).

86i. Var. **furvus** SANTSCHI, 1911, Rev. Zool. Afr., I, p. 213 (♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

87. **Camponotus dewitzi** FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 187 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 228. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 775.

*Camponotus (Myrmosaga) dewitzi* FOREL, 1914, Rev. Suisse Zool., XXII, p. 269.

Type locality: Chinchoxo, PORTUGUESE CONGO (Falkenstein).

88. **Camponotus favorabilis** SANTSCHI.

*Camponotus (Myrmosaga) favorabilis* SANTSCHI, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 349 (♀).

Type locality: Nyamandloru, RHODESIA (G. Arnold).

89. **Camponotus jeanneli** SANTSCHI.

*Camponotus (Myrmosaga) jeanneli* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 137, fig. 30 (♀).

Type locality: Mombasa, BRITISH EAST AFRICA (Alluaud and Jeannel).

BRITISH EAST AFRICA: Likoni; Ramisi; Tchania River, Kikuyu, 1520 m. (Alluaud and Jeannel).

90. **Camponotus lilianæ** FOREL. BEQUAERT, 1913, Rev. Zool. Afr., II, p. 431.<sup>2</sup>

*Camponotus (Myrmamblys) lilianæ* FOREL, 1913, ibid., II, p. 344 (♀); 1914, Rev. Suisse Zool., XXII, p. 271. SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 134 (♀).

Type locality: Sankisia, BELGIAN CONGO (J. Bequaert).

BRITISH EAST AFRICA: Mbuyuni, Pori, 1150 m.; Taveta, 750 m. (Alluaud and Jeannel).

<sup>1</sup>Placed by Santschi (1921) in the subgenus *Myrmospincta*.

<sup>2</sup>Placed by Santschi (1921) in the subgenus *Myrmamblys*.

90a. Subsp. **cornutus** FOREL, 1913, Rev. Zool. Afr., II, p. 345 (♀).

Type locality: Elisabethville, BELGIAN CONGO (J. Bequaert).

91. **Camponotus orinodromus** SANTSCHI.

*Camponotus (Myrmamblys) orinodromus* SANTSCHI, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 347; fig. 4e (♀).

Type locality: Mt. Matroosberg, CAPE PROVINCE (R. W. Tucker).

92. **Camponotus orites** SANTSCHI.

*Camponotus (Myrmamblys) orites* SANTSCHI, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 346, fig. 4d (♀).

Type locality: Mt. Matroosberg, CAPE PROVINCE (R. W. Tucker).

93. **Camponotus ostiarius** FOREL.

*Camponotus (Myrmamblys) ostiarius* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 258 (♀).

Type locality: Durban, NATAL (G. Arnold).

94. **Camponotus yvonnæ** FOREL.<sup>1</sup>

*Camponotus (Myrmamblys) yvonnæ* FOREL, 1919, Bull. Soc. Vaudoise Sc. Nat., (5) LII, p. 480 (♀).

Type locality: Stanleyville, BELGIAN CONGO (Kohl).

### **Phasmomyrmex** STITZ

*Phasmomyrmex* STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 146. EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 252.

*Camponotus* subg. *Phasmomyrmex* FOREL, 1914, Rev. Suisse Zool., XXII, p. 264.

Genotype: *Camponotus buchneri* Forel, 1886 (= *Phasmomyrmex sericeus* Stitz, 1910).

1. **Phasmomyrmex buchneri** (FOREL) EMERY, 1920, Rev. Zool. Afr., VIII, 2, p. 260. See p. 256.

*Camponotus buchneri* FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 183 (♀). ERN. ANDRÉ, 1892, Rev. d'Ent. Caen, XI, p. 45 (♀); DALLA TORRE, 1893, 'Cat. Hym.', VII, p. 223. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 151 (♀). EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 774; 1900, Bull. Soc. Ent. Italiana, XXXII, p. 116, fig. 10 (♀). FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 421 (♀); 1913, Rev. Suisse Zool., XXI, p. 671 (♀).

*Phasmomyrmex sericeus* STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 146, fig. 11 (♀).

*Camponotus (Phasmomyrmex) buchneri* FOREL, 1914, Rev. Suisse Zool., XXII, p. 273.

Type locality: Malange, ANGOLA (M. Buchner).

CAMEROON: Mundame (Conradt); Lomie (Thesing). FRENCH CONGO: Lugny (H. Brauns). BELGIAN CONGO: Lukolela; Avakubi; Medje (Lang and Chapin); Lubutu (J. Bequaert).

### **Polyrhachis** F. SMITH<sup>2</sup>

*Polyrhachis* F. SMITH, 1858, Journ. Proc. Linn. Soc. London, Zool., II, p. 58. ROGER, 1861, Berlin. Ent. Zeitschr., V, p. 174.

<sup>1</sup>Placed by Santschi (1921) in his subgenus *Myrmopelta*.

<sup>2</sup>I have been unable to find the description of *Polyrhachis setulosus* "Smith" recorded from Angola (Welwitsch) by Radoszkowsky, 1881, Journ. Sci. Ac. Lisboa, VIII, No. 31, p. 197.

*Hoplomyrma* s GERSTÄCKER, 1858, Monatsb. Ak. Wiss. Berlin, p. 262.

*Formica* FABRICIUS, LATREILLE, DRURY, etc.

Genotype: *Formica bihamata* Drury, 1773.

### Subgenus 1. *Cyrtomyrma* FOREL

*Polyrhachis* subg. *Cyrtomyrma* FOREL, 1915, Arkiv f. Zool., IX, No. 16, p. 107.

Subgenotype: *Formica rastellata* Latreille, 1802.

1. *Polyrhachis (Cyrtomyrma) alexisi* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 455, fig. 7 (♀).

Type locality: BELGIAN CONGO (Kohl).

2. *Polyrhachis (Cyrtomyrma) kohli* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 454 (♀, ♀).

Type locality: BELGIAN CONGO (Kohl).

### Subgenus 2. *Myrma* BILLBERG

*Myrma* BILLBERG, 1820, 'Enumer. Insect.,' p. 104. WHEELER, 1911, Science, N. S., XXXIII, p. 859.

*Hoplomyrma* GERSTÄCKER, 1858, Monatsb. Ak. Wiss. Berlin, p. 262; in Peters, 1862, 'Reise n. Mossambique, Zool.,' V, p. 507.

Subgenotype: *Formica militaris* FABRICIUS, 1781.

3. *Polyrhachis (Myrma) ænescens* STITZ.

*Polyrhachis ænescens* STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 151 (♀).

Type locality: CAMEROON (v. Knobloch).

4. *Polyrhachis (Myrma) aérope* WM. M. WHEELER. See p. 265 (♀).

Type locality: Niangara, BELGIAN CONGO (Lang and Chapin).

5. *Polyrhachis (Myrma) alluaudi* EMERY.

*Polyrhachis alluaudi* EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), p. 567 (♀), Pl. xv, figs. 9 and 10 (nest). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 258. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 777.

Type locality: Assinie, IVORY COAST (C. Alluaud).

51. Var. *anteplana* FOREL, 1916, Rev. Suisse Zool., XXIV, p. 448 (♀). See p. 266.

Type locality: BELGIAN CONGO (Kohl).

BELGIAN CONGO: Stanleyville (Lang and Chapin).

6. *Polyrhachis (Myrma) arnoldi* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 263 (♀).

Type locality: Durban, NATAL (G. Arnold).

7. *Polyrhachis (Myrma) atalanta* WM. M. WHEELER. See p. 263 (♀).

Type locality: Stanleyville, BELGIAN CONGO (Lang and Chapin).

8. *Polyrhachis (Myrma) bequaerti* WM. M. WHEELER. See p. 267 (♀).

Type locality: Utiasiki, between Lubutu and Kirundu, BELGIAN CONGO (J. Bequaert).

9. *Polyrhachis (Myrma) concava* ERN. ANDRÉ. FOREL, 1916, Rev. Suisse Zool., XXIV, p. 448 (♀, ♀). See p. 265.

*Polyrhachis concava* ERN. ANDRÉ, 1889, Rev. d'Ent. Caen, VIII, p. 218 (♀); 1892, ibid., XI, p. 45 (♀, ♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 260. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 154 (♀). EMERY, 1896, Mem. Accad. Sc.



Bologna, (5) V, p. 777. FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 61 (♀). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 149 (♀). FOREL, 1911, Rev. Zool. Afr., I, p. 282 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 359 (♀).

Type locality: SIERRA LEONE (Mocquerys).

CAMEROON: (H. BRAUNS); Mundame (Conradt); Bibundi (Tessmann); Yaunde (Zenker). FRENCH CONGO: Gaboon. BELGIAN CONGO: (Kohl); Congo da Lemba; Mondombe (R. Mayné); Lower Congo, in stomach of *Manis temminckii* (Solon); Stanleyville; Akenge (Lang and Chapin).

10. ***Polyrhachis (Myrma) consimilis* F. SMITH.**

*Polyrhachis consimilis* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 73 (♀), Pl. IV, figs. 30 and 31. ROGER, 1863, 'Verzeich. Formicid.,' p. 6. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 444; 1886, *ibid.*, XXXVI, p. 357. ERN. ANDRÉ, 1887, Rev. d'Ent. Caen, VI, p. 286 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 260. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 779.

Type locality: SIERRA LEONE (D. F. Morgan).

11. ***Polyrhachis (Myrma) cornuta* STITZ.**

*Polyrhachis cornuta* STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 150 (♀).

Type locality: Kimpoko, BELGIAN CONGO (Büttner).

12. ***Polyrhachis (Myrma) cubaënsis* MAYR.**

*Polyrhachis cubaënsis* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 686 (♀); 1863, *ibid.*, XIII, p. 444. ROGER, 1863, 'Verzeich. Formicid.,' p. 9. EMERY, 1889, Bull. Soc. Ent. Italiana, XXI, p. 69. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 261. MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 197. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 777.

Type locality: Port Natal, NATAL (described as from Cuba by Mayr).

12a. Var. ***striolato-rugosa*** MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 196 (♀). EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 777.

*Polyrhachis cubaënsis* var. *striolato-rugosa* H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 38.

Type locality: ZANZIBAR (Stuhlmann).

12a. Subsp. ***durbanensis*** FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 262 (♀, ♀).

Type locality: Durban, NATAL (C. B. Cooper).

12b. Subsp. ***gallicola*** FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 71 (♀, ♀). EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 777. FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 92 (♀).

Type locality: Delagoa, PORTUGUESE EAST AFRICA (Liengme).

BRITISH EAST AFRICA: Chake Chake, Pemba Island (Voeltzkow).

12c. Subsp. ***gerstaeckeri*** (FOREL) EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 777.

*Polyrhachis gerstaeckeri* FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 197 (♀). ERN. ANDRÉ, 1887, Rev. d'Ent. Caen, VI, p. 287. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 262. MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 196.

*Polyrhachis cubaënsis* var. *gerstaeckeri* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 71.

*Polyrhachis gerstaeckeri* H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 38.

Type locality: ZANZIBAR (Hildebrandt).

PORTUGUESE EAST AFRICA: Delagoa Bay (Liengme).

12d. Subsp. **wilmsi** FOREL, in Schultze, 1910, 'Forschungsreise in Südafrika,' IV, p. 30 (♀).

Type locality: Lobombo Borges, MOZAMBIQUE (Wilms).

13. **Polyrhachis (Myrma) curta** ERN. ANDRÉ.

*Polyrhachis curta* ERN. ANDRÉ, 1890, Rev. d'Ent. Caen, IX, p. 312 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 261. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 777.

Type locality: SIERRA LEONE (Mocquerys).

14. **Polyrhachis (Myrma) decemdentata** ERN. ANDRÉ. FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 351 (♀, ♀, ♂); 1916, Rev. Suisse Zool., XXIV, p. 450 (♀). See p. 267.

*Polyrhachis decemdentata* ERN. ANDRÉ, 1889, Rev. d'Ent. Caen, VIII, p. 219 (♀). EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), p. 566 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 261. ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 1 (♀, ♀). MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 153 (♀, ♀). EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 777. MAYR, 1902, Verh. Zool. Bot. Ges. Wien, LII, p. 300 (♀). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 149 (♀). FOREL, 1911, Rev. Zool. Afr., I, p. 282 (♀); 1913, Rev. Suisse Zool., XXI, p. 673 (♀).

Type locality: SIERRA LEONE (Mocquerys).

FRENCH GUINEA: Los Islands (H. Brauns). SIERRA LEONE: Sherbro Island (H. Brauns). IVORY COAST: Assinie (C. Alluaud). CAMEROON: (Conradt); Bibundi (Tessmann). FERNANDO PO: (R. Buchholz). FRENCH CONGO: Ogowe (Mocquerys). BELGIAN CONGO: Congo da Lemba (R. Mayné); St. Gabriel (Kohl); Stanleyville (Lang and Chapin); Malela (J. Bequaert).

14<sub>1</sub>. Var. **fernandensis** FOREL, 1901, Ann. Soc. Ent. Belgique, XLV, p. 377 (♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 396 (♀, ♀).

Type locality: FERNANDO PO (Conradt).

FRENCH CONGO: Brazzaville (A. Weiss).

14<sub>2</sub>. Var. **flavipes** STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 149 (♀, ♀).

Type locality: Victoria, CAMEROON (Faber).

15. **Polyrhachis (Myrma) fissa** MAYR.

*Polyrhachis fissa* MAYR, 1902, Verh. Zool. Bot. Ges. Wien, LII, p. 301 (♀, ♀). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 149 (♀, ♀).

Type locality: Victoria, CAMEROON (R. Buchholz).

CAMEROON: Bibundi (Tessmann); Mundame (Conradt). SPANISH GUINEA: Nkolentanga (Tessmann).

16. **Polyrhachis (Myrma) gagates** F. SMITH. SANTSCHI, 1914 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 139 (♀). See p. 262.

*Polyrhachis gagates* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 71 (♀). Pl. IV, fig. 14. ROGER, 1863, 'Verzeich. Formicid.,' p. 6. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 444. GERSTÄCKER, 1871, Arch. f. Naturg., XXXVII, 1, p. 354; 1873, in 'v. d. Decken's Reisen in Ost Afrika, Gliederthiere,' p. 342 (♀). FOREL, 1879, Bull. Soc. Vaudoise Sc. Nat., (2) XVI, p. 117 (♀); 1886, Ann. Soc. Ent. Belgique, XXX, p. 194 (♀, ♀). MAYR, 1886, Verh. Zool. Bot. Ges. Wien, XXXVI, p. 357. ERN. ANDRÉ, 1887, Rev. d'Ent. Caen, VI, p. 287 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 262. MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 197. WASMANN, 1894, 'Verzeichn. Myrmecoph. Termitoph. Arthrop.,' p. 184. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 72. MAYR, 1895, Ann.

Naturh. Hofmus. Wien, X, p. 154. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 777. MAYR, in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 22. DIXEY and LONGSTAFF, 1907, Trans. Ent. Soc. London, p. 375. FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 38 (♀); in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 92 (♀); 1909, Ann. Soc. Ent. Belgique, LIII, p. 54. ZAVATTARI, 1909, 'Il Ruwenzori, Parte Scientif.,' I, p. 215 (♀). STITZ, 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08),' III, p. 392 (♀). FOREL, 1913, Rev. Zool. Afr., II, p. 349 (♀).

*Polyrhachis gagates* H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 38.

Type locality: Port Natal, NATAL.

BELGIAN CONGO: Zambi (Lang and Chapin); Boma (H. Brauns); Beni (Borgerhoff); Kasindi (Schubotz). ANGOLA: Malange (M. Buchner). UGANDA: Katende (Duke of Abruzzi). BRITISH EAST AFRICA: Mombasa (v. d. Decken); Kitui (Hildebrandt); Chake Chake, Pemba Island (Voeltzkow). GERMAN EAST AFRICA: Tanga (H. Brauns; Alluaud and Jeannel); Mt. Kilimanjaro (Bornemisza); Kibonoto, Mt. Kilimanjaro, 1000-1200 m.; Mombo, Usambara (Sjöstedt); Rosako, Usaramo (Stuhlmann). ZANZIBAR: (Hildebrandt). PORTUGUESE EAST AFRICA: Delagoa (Liengme). TRANSVAAL: Valdezia (P. Berthoud). CAPE PROVINCE: East London (Dixey and Longstaff).

16a. Subsp. *indefinita* FOREL, 1913, Rev. Zool. Afr., II, p. 349 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 147 (♀).

*Polyrhachis gagates* var. *indefinita* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 42 (♀). TRÄGÅRDH, *ibid.*, p. 47.

*Polyrhachis (Myrma) gagates* var. *indefinita* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 139 (♀).

Type locality: Sankisia, BELGIAN CONGO (J. Bequaert).

NATAL: Amanzimtoti (I. Trägårdh). SOUTHERN RHODESIA: Sebakwe (G. Arnold). BRITISH EAST AFRICA: Voi, Wa-Taita, 600 m. (Alluaud and Jeannel).

17. *Polyrhachis (Myrma) gamai* SANTSCHI, 1917, Ann. Soc. Ent. France, LXXXV, (1916), p. 295 (♀).

Type locality: Durban, NATAL (Marley).

18. *Polyrhachis (Myrma) laboriosa* F. SMITH. SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 384 (♀). FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 351 (♀); 1916, Rev. Suisse Zool., XXIV, p. 447 (♀, ♀). See p. 258.

*Polyrhachis laboriosus* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 72 (♀), Pl. iv, figs. 21 and 22. ROGER, 1863, 'Verzeich. Formicid.,' p. 6. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 445. RADOSZKOWSKY, 1881, Jorn. Sci. Ac. Lisboa, VIII, No. 31, p. 197. MAYR, 1886, Verh. Zool. Bot. Ges. Wien, XXXVI, p. 357. FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 195 (♀). ERN. ANDRÉ, 1887, Rev. d'Ent. Caen, VI, p. 286 (♀). EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), p. 566 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 264. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 72. MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 153 (♀); 1896, Ent. Tidskr., XVII, pp. 250 (♀) and 255, Pl. iv, fig. 3 (nest). SJÖSTEDT, 1904, 'I Västafrikas Urskogar,' p. 501, fig. 3 (nest). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 393 (♀, ♀, ♂). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 151 (♀, ♀). FOREL, 1911, Rev. Zool. Afr., I, p. 282 (♀). WASMANN, 1911, 1<sup>er</sup> Congr. Intern. Entom. Bruxelles (1910), II, Mém., p. 231, Pl. xvi, fig. 33 (nest); 1913, Ann. Rept. Smiths. Inst. for 1912, p. 472, Pl. x, fig. 33 (nest). FOREL, 1913, Rev. Zool. Afr., II, p. 349 (♀).

*Polyrachis laboriosa* M. L. SYKES, 1900, Trans. Manchester Microsc. Soc., XX, (1899), p. 88 (nest).

Type locality: SIERRA LEONE (D. F. Morgan).

IVORY COAST: Assinie (C. Alluaud). GOLD COAST: (Ganger). TOGO: Bismarckburg (Conradt). SOUTHERN NIGERIA: Lagos (F. Silvestri). CAMEROON: (Sjöstedt; H. Brauns); Bipindi (Zenker); Bibundi (Tessmann). SPANISH GUINEA: Alen (Tessmann). FRENCH CONGO: Cape Lopez (H. Brauns); Brazzaville (A. Weiss). PORTUGUESE CONGO: Chinchoxo (Falkenstein). BELGIAN CONGO: Congo da Lemba (R. Mayné); Kondué (Luja); St. Gabriel; Tshopo River near Stanleyville (Kohl); Stanleyville; Bafwasende; Niangara (Lang and Chapin). ANGOLA: (Welwitsch).

19. *Polyrachis (Myrma) lanuginosa* SANTSCHI.

*Polyrachis lanuginosa* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 394, fig. 17 (♀).

Type locality: Mindouli, FRENCH CONGO (A. Weiss).

20. *Polyrachis (Myrma) lauta* SANTSCHI.

*Polyrachis lauta* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 397, fig. 19 (♀). FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 450 (♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

20<sub>1</sub>. Var. *localis* FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 359 (♀).

Type locality: Congo da Lemba, BELGIAN CONGO (R. Mayné).

21. *Polyrachis (Myrma) maynei* FOREL.

*Polyrachis maynei* FOREL, 1911, Rev. Zool. Afr., I, p. 282 (♀).

Type locality: Congo da Lemba, BELGIAN CONGO (R. Mayné).

22. *Polyrachis (Myrma) militaris* (FABRICIUS). See p. 260.

*Formica militaris* FABRICIUS, 1781, 'Spec. Insect.,' I, p. 493 (♀); 1787, 'Mantissa Insect.,' I, p. 310 (♀). GMELIN, in Linnæus, 1790, 'Syst. Nat.,' Ed. 13, I, 5, p. 2802. OLIVIER, 1791, 'Encycl. Méthod. Insect.,' VI, p. 499. FABRICIUS, 1793, 'Ent. Syst.,' II, p. 362 (♀). LATREILLE, 1802, 'Hist. Nat. Fourmis,' p. 124 (♀), Pl. iv, fig. 22. FABRICIUS, 1804, 'Syst. Piez.,' p. 414 (♀).

*Polyrachis militaris* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 72 (♂), Pl. III, fig. 5 and Pl. IV, fig. 36. ROGER, 1863, 'Verzeich. Formicid.,' p. 6. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 445; 1866, *ibid.*, XVI, p. 886 (♀). FOREL, 1879, Bull. Soc. Vaudoise Sc. Nat., (2) XVI, p. 119 (♀, ♀, ♂); 1886, Ann. Soc. Ent. Belgique, XXX, p. 194 (♀, ♀). ERN. ANDRÉ, 1887, Rev. d'Ent. Caen, VI, p. 287 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 265. H. STADELMANN, 1893, Mitth. Deutsch. Schutzgeb., VI, p. 217. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 72. EMERY, 1894, Mem. Accad. Sc. Bologna, (5) IV, p. 113 (♀); ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 1 (♀, ♀). MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 154 (♀). EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 777. MAYR, 1896, Ent. Tidskr., XVII, p. 252 (♀). FOREL, 1897, Abhandl. Senckenberg. Naturf. Ges., XXI, p. 188 (♀). SJÖSTEDT, 1904, 'I Västafrikas Urskogar,' p. 507. FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 38 (♀); 1907, Mitt. Naturh. Mus. Hamburg, XXIV, p. 16 (♀); 1909, Ann. Soc. Ent. Belgique, LIII, p. 73 (♀). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 150 (♀, ♀). FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 372; 1913, Rev. Suisse Zool., XXI, p. 672 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 357 (♀).

*Polyrachis militaris* H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 38. M. L. SYKES, 1900, Trans. Manchester Microsc. Soc., XX, (1899), p. 91.

Type locality: Tropical Africa.

SIERRA LEONE: Samlia Falls, N'Gamie River (Mocquerys). TOGO: Bismarckburg (Büttner). SOUTHERN NIGERIA: Old Calabar (H. Brauns). CAMEROON: Bibundi (Tessmann); Longji (Paschen); Yaunde (Scheunemann); Mundame (Conradt). FERNANDO PO: (Conradt). FRENCH CONGO: Ogowe (Mocquerys). PORTUGUESE CONGO: Chinchoxo (Falkenstein). BELGIAN CONGO: Mayombe (de Brie); Congo da Lemba (R. Mayné); Sankuru (Luja); Leopoldville; Lukolela; Lie; Stanleyville; Avakubi; Lubila; Panga; Medje; Ngayu; Boyulu (Lang and Chapin). PORTUGUESE EAST AFRICA: Delagoa (Liengme); Mozambique (Fornasini). GERMAN EAST AFRICA: Tanga (Zimmer); Barikiwa (Ch. Schröder).

22. Var. *calabarica* FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 38 (♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 400 (♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 385 (♀).

Type locality: Old Calabar, SOUTHERN NIGERIA.

FRENCH GUINEA: Kakoulina (F. Silvestri). FRENCH CONGO: Brazzaville (A. Weiss).

22. Var. *ssibangensis* FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 38 (♀).

*Polyrhachis militaris* var. *sibangensis* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 400 (♀, ♀).

Type locality: Sibange, FRENCH CONGO (Soyaux).

FRENCH CONGO: Brazzaville (A. Weiss).

22a. Subsp. *bruta* SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, p. 166 (♀).

Type locality: BELGIAN CONGO.

22b. Subsp. *cupreopubescens* FOREL, 1879, Bull. Soc. Vaudoise Sc. Nat., (2) XVI, p. 120 (♀). ERN. ANDRÉ, 1887, Rev. d'Ent. Caen, VI, p. 287 (♀). EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), p. 566 (♀). MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 154. ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 1 (♀). EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 777. FOREL, 1901, Mitt. Naturh. Mus. Hamburg, XVIII, p. 77 (♀); 1907, Ann. Mus. Nat. Hungarici, V, p. 38 (♀). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 400 (♀). FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 54 (♀). STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 150 (♀, ♀); 1911, 'Wiss. Ergebn. Deutsch. Zentr. Afr. Exp. (1907-08)', III, p. 392 (♀). FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 372 (♀); 1912, Mitt. Naturh. Mus. Hamburg, XXIX, p. 180; 1913, Rev. Zool. Afr., II, p. 347 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ', p. 140 (♀). STITZ, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11', I, p. 404 (♀). See p. 260.

*Polyrhachis cupreopubescens* DALLA TORRE, 1893, 'Cat. Hym.', VII, p. 261.

Type locality: Africa; exact locality unknown.

SIERRA LEONE: Samlia Falls, River N'Gamie (Mocquerys). IVORY COAST: Assinie (C. Alluaud). SOUTHERN NIGERIA: Old Calabar (Duke). CAMEROON: Bibundi (Tessmann); Molundu (Schultze). SPANISH GUINEA: Eloby Island (H. Brauns). FRENCH CONGO: Sibange (Soyaux); Ogowe (Mocquerys); Brazzaville (A. Weiss). BELGIAN CONGO: Katanga (Lemaire); Kwesi to Kilo (Bayer); Avakubi (Schubotz); Medje; Avakubi (Lang and Chapin); Duma; Libenge (Schubotz). UGANDA: Entebbe (Schultze). BRITISH EAST AFRICA: Taveta (Alluaud and Jeannel). GERMAN EAST AFRICA: Mt. Kilimanjaro (Bornemisza); Arusha-chini (Katona); Amani; Buiko (H. Prell; Zimmer); Usambara.

- 22b<sub>1</sub>. Var. **dido** Wm. M. WHEELER, new name. See p. 261.  
*Polyrhachis militaris* subsp. *cupreopubescens* var. *argentatus* STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 150 (♀) (*nec Polyrhachis argentatus* F. Smith, 1858).  
 Type locality: Bibundi, CAMEROON (Zenker; Tessmann).  
 LIBERIA: Mt. Coffee (R. P. Currie). CAMEROON: Longji (Paschen).  
 22b<sub>2</sub>. Var. **epinotalis** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 357 (♀).  
 Type locality: Elisabethville, BELGIAN CONGO (Leplae).  
 22b<sub>3</sub>. Var. **nkomoënsis** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 447 (♀, ♂). See p. 261.  
 Type locality: BELGIAN CONGO (Kohl).  
 BELGIAN CONGO: Akenge (Lang and Chapin).  
 22b<sub>4</sub>. Var. **sankisiana** FOREL, 1913, Rev. Zool. Afr., II, p. 348 (♀).  
 Type locality: Sankisia, BELGIAN CONGO (J. Bequaert).  
 22b<sub>5</sub>. Var. **transversaria** FOREL, 1901, Mitt. Naturh. Mus. Hamburg, XVIII, p. 77 (♀). See p. 261.  
 Type locality: LIBERIA (Hadler).  
 22c. Subsp. **striativentris** EMERY, 1892, Ann. Soc. Ent. France, LX, (1891), p. 566 (♀); 1896, Mem. Accad. Sc. Bologna, (5) V, p. 777. SANTSCHI, 1912, Ann. Soc. Ent. Belgique, LVI, p. 166 (♀).  
*Polyrhachis striativentris* DALLA TORRE, 1893, 'Cat. Hym.', VII, p. 270.  
 Type locality: Assinie, IVORY COAST (C. Alluaud).  
 IVORY COAST: (Lohier).  
 23. **Polyrhachis (Myrma) monista** SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 384, fig. 34 (♀). FOREL, 1916, Rev. Suisse Zool., XXIV, p. 452 (♀, ♀).  
*Polyrhachis monista* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 398, fig. 20 (♀).  
 Type locality: FRENCH CONGO.  
 GOLD COAST: Aburi (F. Silvestri). BELGIAN CONGO: Kilongalunga (Kohl).  
 24. **Polyrhachis (Myrma) natalensis** SANTSCHI.  
*Polyrhachis natalensis* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 41 (♀).  
 Type locality: Stamford Hill, NATAL (I. Trägårdh).  
 25. **Polyrhachis (Myrma) nigrita** MAYR. See p. 267.  
*Polyrhachis nigrita* MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 153 (♀). EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 777.  
 Type locality: Chama, GOLD COAST (H. Brauns).  
 BELGIAN CONGO: Akenge (Lang and Chapin).  
 26. **Polyrhachis (Myrma) otleti** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 449 (♀, ♀, ♂).  
 Type locality: St. Gabriel, BELGIAN CONGO (Kohl).  
 27. **Polyrhachis (Myrma) phidias** FOREL.  
*Polyrhachis phidias* FOREL, 1910, Ann. Soc. Ent. Belgique, LIV, p. 450 (♀).  
 Type locality: Equatorial Africa, exact locality unknown.  
 28. **Polyrhachis (Myrma) revoili** ERN. ANDRÉ. FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 262 (♀); 1916, Rev. Suisse Zool., XXIV, p. 452 (♀, ♂). See p. 267.

*Polyrhachis revoili* ERN. ANDRÉ, 1886, Rev. d'Ent. Caen, VI, pp. 285 and 287 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 268. FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 71 (♀). ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 1 (♀, ♀). MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 153. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 778. FOREL, 1913, Rev. Zool. Afr., II, p. 349 (♀, ♀).

Type locality: SOMALILAND (Revoil).

FRENCH CONGO: Ogowe (Mocquers). BELGIAN CONGO: (Kohl); Kondué (Luja); Malela (J. Bequaert). PORTUGUESE EAST AFRICA: Delagoa (Liengme). NATAL: Durban (C. B. Cooper); Port Natal (H. Brauns).

28i. Var. **conduensis** FOREL, 1915, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 351 (♀).

Type locality: Kondué, BELGIAN CONGO (Luja).

28s. Var. **donisthorpei** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 453 (♀); 1917, Bull. Soc. Vaudoise Sc. Nat., (5) LI, p. 252 (♀).

Type locality: NORTHERN RHODESIA.

28a. Subsp. **volkarti** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 453 (♀).

Type locality: BELGIAN CONGO (Kohl).

29. **Polyrhachis (Myrma) rufipalpis** SANTSCHI.

*Polyrhachis rufipalpis* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 396 (♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

29a. Subsp. **mayumbensis** FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 358 (♀).

Type locality: Kiniati, Mayombe, BELGIAN CONGO (R. Mayné).

30. **Polyrhachis (Myrma) schistacea** (GERSTÄCKER) SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' pp. 140 and 142 (♀).

*Hoplomyrmus schistaceus* GERSTÄCKER, 1858, Monatsb. Ak. Wiss. Berlin, p. 262 (♀).

*Hoplomyrmus schistazeus* GERSTÄCKER, in Peters, 1862, 'Reise n. Mossambique, Zool.,' V, p. 508 (♀), Pl. xxxii, fig. 6.

*Polyrhachis schistazeus* MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 446. GERSTÄCKER, 1871, Arch. f. Naturg., XXXVII, 1, p. 354; 1873, in 'v. d. Decken's Reisen in Ost-Afrika, Gliederthiere,' p. 342 (♀).

*Polyrhachis militaris* subsp. *schistacea* ERN. ANDRÉ, 1887, Rev. d'Ent. Caen, VI, p. 288 (♀). EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 777.

*Polyrhachis schistacea* ROGER, 1863, 'Verzeich. Formicid.,' p. 6. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 268. BINGHAM, 1903, Ann. Mag. Nat. Hist., (7) XII, p. 63 (♀). DIXEY and LONGSTAFF, 1907, Trans. Ent. Soc. London, pp. 344 and 355. FOREL, 1907, Ann. Mus. Nat. Hungarici, V, p. 38 (♀); 1907, Mitth. Naturh. Mus. Hamburg, XXIV, p. 16 (♀); in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 92 (♀, ♀); 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 372 (♀); 1913, Rev. Zool. Afr., II, p. 348 (♀).

*Polyrhachis militaris* var. *schistazea* H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 38.

Type locality: Mozambique, PORTUGUESE EAST AFRICA (Peters).

PORTUGUESE CONGO: Chinchoxo. BELGIAN CONGO: Beni (Borgerhoff). BRITISH EAST AFRICA: Victoria Nyanza (Zimmer); Tiwi to Gazi (Alluaud and Jeannel); Mombasa (v. d. Decken); Fundu Island; Chake Chake, Pemba Island

(Voeltzkow). GERMAN EAST AFRICA: Mt. Kilimanjaro (Bornemisza); Barikiwa (Ch. Schröder); Tanga (Zimmer). ZANZIBAR: Mwera River; Bububu (Alluaud and Jeannel). NYASALAND: Fort Johnston (Rendall). RHODESIA: Matoppo Hills; Victoria Falls (Dixey and Longstaff). TRANSVAAL: Pretoria (Distant).

30<sub>1</sub>. Var. **divina** FOREL, 1913, Rev. Zool. Afr., II, p. 348 (♀). SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' pp. 141 and 142 (♀). See p. 261. Type locality: Pemba Island, BRITISH EAST AFRICA (Voeltzkow).

BELGIAN CONGO: Zambi; Boma; Thysville; Poko (Lang and Chapin). BRITISH EAST AFRICA: Mombasa; Bura, Wa-Taita, 1050 m. (Alluaud and Jeannel). GERMAN EAST AFRICA: Darressalaam. ZANZIBAR.

30<sub>2</sub>. Var. **gagatoides** SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 314; 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 142 (♀).

Type locality: FRENCH CONGO (A. Weiss).

30a. Subsp. **atrociliata** SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 314 (♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 385 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' pp. 141 and 142 (♀). Smitz, 1916, 'Ergebn. Zweit. Deutsch. Zentr. Afr. Exp. 1910-11,' I, p. 404 (♀).

Type locality: Banzyville, BELGIAN CONGO (Augustin).

FRENCH GUINEA: Konakry (F. Silvestri). UGANDA: Ibanda, Mt. Ruwenzori, 1400 m. (C. Alluaud). BELGIAN CONGO: Duma (Schubotz). FRENCH CONGO: Fort Crampel (Schubotz).

30a<sub>1</sub>. Var. **benguensis** SANTSCHI, 1913, Ann. Soc. Ent. Belgique, LVII, p. 314 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' pp. 141 and 142 (♀). See p. 261.

Type locality: BENGUELA (J. Cruchet).

BELGIAN CONGO: Garamba; Yakuluku (Lang and Chapin).

30b. Subsp. **congolensis** (SANTSCHI) FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 357 (♀).

*Polyrhachis schistacea* var. *congolensis* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 399 (♀).

*Polyrhachis gagates* subsp. *congolensis* FOREL, 1913, Rev. Zool. Afr., II, p. 282 (♀).

*Polyrhachis (Myrma) gagates* var. *congolensis* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 139 (♀).

Type locality: Mandouga, FRENCH CONGO (A. Weiss).

FRENCH CONGO: Comba Ibre (A. Weiss). BELGIAN CONGO: Congo da Lemba (R. Mayné). BRITISH EAST AFRICA: Bura, Wa-Taita, 1050 m.; Voi (Alluaud and Jeannel).

30c. Subsp. **fracta** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' pp. 141 and 142 (♀).

Type locality: Fort Hall, 1330 m., BRITISH EAST AFRICA (Alluaud and Jeannel).

30c<sub>1</sub>. Var. **subplana** SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 142 (♀).

Type locality: Gazi, BRITISH EAST AFRICA (Alluaud and Jeannel).

30d. Subsp. **medusa** FOREL, 1897, Abhandl. Senckenberg. Naturf. Ges., XXI, p. 206 (♀, ♀, ♂); 1901, Mitt. Naturh. Mus. Hamburg, XVIII, p. 78.

*Polyrhachis militaris* subsp. *schistacea* var. *medusa* EMERY, 1898, Rend. Accad. Sc. Bologna, N. S., II, p. 228.



*Polyrhachis medusa* FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 92 (♀, ♀).

*Polyrhachis (Myrma) medusæ* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 140 (♀).

Type locality: ZANZIBAR (Voeltzkow).

GERMAN EAST AFRICA: Mafia Island (Voeltzkow); Lewa Mambaa (Stuhlmann).

BRITISH EAST AFRICA: Ramisi River; Voi, Taita (Alluaud and Jeannel); Chake Chake, Pemba Island (Voeltzkow).

30e. Subsp. *nigriseta* (SANTSCHI) FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 357.

*Polyrhachis nigriseta* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 399 (♀). FOREL, 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 272 (♀).

Type locality: Mindouli, FRENCH CONGO (A. Weiss).

WESTERN ABYSSINIA: (Ilg).

30e. Var. *clariseta* (SANTSCHI) FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, p. 357 (♀).

*Polyrhachis nigriseta* var. *clariseta* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 400 (♀).

*Polyrhachis (Myrma) nigriseta* var. *clariseta* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 140 (♀).

Type locality: Mandouga, FRENCH CONGO (A. Weiss).

BELGIAN CONGO: Congo da Lemba (R. Mayné). BRITISH EAST AFRICA: Voi, Taita (Alluaud and Jeannel).

30f. Subsp. *rugulosa* (MAYR) FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 92 (♀); 1910, Ann. Soc. Ent. Belgique, LIV, p. 450 (♀). STRITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 151 (♀). FOREL, 1913, Ann. Soc. Ent. Belgique, LVII, pp. 147 (♀) and 357 (♀); 1913, Rev. Zool. Afr., II, p. 349 (♀); 1913, Deutsch. Ent. Zeitschr., Beih., p. 225 (♀).

*Polyrhachis rugulosus* MAYR, 1862, Verh. Zool. Bot. Ges. Wien, XII, p. 685 (♀), Pl. I, fig. 7. ROGER, 1863, 'Verzeich. Formicid.,' p. 9. EMERY, 1889, Bull. Soc. Ent. Italiana, XXI, p. 69, footnote. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 268. EMERY, 1894, Mem. Accad. Sc. Bologna, (5) IV, p. 113 (♀). FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 72. EMERY, 1895, Ann. Soc. Ent. France, LXIV, p. 55 (♀); 1896, Mem. Accad. Sc. Bologna, (5) V, p. 777; 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 605 (♀, ♀, ♂). SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 400. EMERY, 1912, Annuar. Mus. Zool. Univ. Napoli, N. S., III, No. 26, p. 2.

*Polyrhachis carinatus* F. SMITH, 1858, Journ. Proc. Linn. Soc. London, Zool., II, p. 59; 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 71 (♀), Pl. iv, figs. 48 and 49 (*nec Formica carinata* Fabricius).

*Polyrhachis militaris* subsp. *cafrorum* FOREL, 1879, Bull. Soc. Vaudoise Sc. Nat., XVI, p. 120 (♀, ♀, ♂); 1886, Ann. Soc. Ent. Belgique, XXX, p. 194 (♀). ERN. ANDRÉ, 1887, Rev. d'Ent. Caen, VI, p. 287 (♀).

*Polyrhachis cafrorum* FOREL, 1892, Mitth. Schweiz. Ent. Ges., VIII, p. 350 (♀). EMERY, 1892, Ann. Mus. Civ. Genova, XXXII, p. 122. DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 260.

*Polyrhachis militaris* var. *rugulosa* MAYR, 1893, Jahrb. Hamburg. Wiss. Anst., X, 2, p. 197; 1895, Ann. Naturh. Hofmus. Wien, X, p. 154; in Sjöstedt, 1907, 'Exped. Kilimandjaro, Meru, etc.,' II, 8, p. 22.

*Polyrhachis militaris* var. *rugulosa* H. STADELMANN, 1898, 'Deutsch-Ost-Afrika,' IV, Hym., p. 38.

*Polyrhachis schistacea* var. *rugulosa* FOREL, 1911, Bull. Soc. Vaudoise Sc. Nat., (5) XLVII, p. 372 (♀).

*Polyrhachis (Myrma) schistacea* var. *rugulosa* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' pp. 141 and 142 (♀); 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 385 (♀).

Type locality: Port Natal, NATAL (not Brazil as originally given by Mayr).

TOGO: Bismarckburg (Conradt). CAMEROON: Etombe (Adametz). FRENCH CONGO: Loango (H. Brauns); Brazzaville; Comba Ibire; Mandouga (A. Weiss). PORTUGUESE CONGO: Chinchoxo (Falkenstein). BELGIAN CONGO: Kwesi to Kilo (Bayer); Kimpoko (Büttner); Old Kasongo (J. Bequaert); Congo da Lemba (R. Mayné); Boma (H. Brauns; Styczinski); Luapula River. ANGOLA: Quifangondo (F. Silvestri). RHODESIA: (G. Arnold). TRANSVAAL: Makapan; Hamman's Kraal (E. Simon); Valdezia (P. Berthoud). CAPE PROVINCE: Kimberley (E. Simon). PORTUGUESE EAST AFRICA: Delagoa (Liengme; A. Müller); Mozambique (Fornasini); Quilimane (Stuhlmann). GERMAN EAST AFRICA: Daressalaam (H. Brauns; A. Müller); Kibonoto, Kilimanjaro, 1000-3000 m.; Meru (Sjöstedt); Mafia Island (Voeltzkow). ZANZIBAR: (Stuhlmann). BRITISH EAST AFRICA: Kitui (Hildebrandt); Bura (H. Brauns); Mbuyuni, Pori, 1110 m. (Alluaud and Jeannel). SOMALILAND: (C. Keller); Magala Re Umberto (Ruspoli). ABYSSINIA: Webi (Bricchetti-Robecchi).

30f. Var. *divinoides* FOREL, 1913, Rev. Zool. Afr., II, pp. 348 and 349 (♀). BEQUAERT, *ibid.*, p. 431. See p. 261.

*Polyrhachis (Myrma) schistacea* var. *divinoides* SANTSCHI, 1914, Boll. Lab. Zool. Gen. Agrar. Portici, VIII, p. 385 (♀); 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 142 (♀).

Type locality: Sankisia, BELGIAN CONGO (J. Bequaert).

BELGIAN CONGO: Boma (F. Silvestri); Banana (Lang and Chapin). TRANSVAAL.

30g. Subsp. *schlüteri* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 72.

*Polyrhachis militaris* subsp. *schlüteri* FOREL, 1886, Ann. Soc. Ent. Belgique, XXX, p. 195 (♀). ERN. ANDRÉ, 1886, Rev. d'Ent. Caen, VI, p. 288 (♀). MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 154 (♀). EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 777. STITZ, 1910, Mitt. Zool. Mus. Berlin, V, p. 151 (♀).

*Polyrhachis schlüteri* DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 268.

*Polyrhachis schistacea* subsp. *schlüteri* SANTSCHI, 1914, Med. Göteborgs Mus. Zool. Afd., III, p. 42 (♀).

*Polyrhachis (Myrma) schlüteri* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidæ,' p. 143 (♀).

Type locality: GERMAN EAST AFRICA (Schlüter).

TOGO: Bismarckburg (Conradt). NATAL: Stamford Hill (I. Trägårdh); Port Natal (H. Brauns). ZULULAND: Dukudu (I. Trägårdh). PORTUGUESE EAST AFRICA: Delagoa (P. Berthoud; Liengme). BRITISH EAST AFRICA: Voi (C. Alluaud).

30g. Var. *indigens* (FOREL).

*Polyrhachis (Myrma) schlüteri* var. *indigens* FOREL, 1914, Bull. Soc. Vaudoise Sc. Nat., (5) L, p. 261 (♀).

Type locality: Durban, NATAL (G. Arnold).

30g. Var. **plebeia** (SANTSCHI).

*Polyrhachis (Myrma) schluteri* var. *plebeia* SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 143 (♀).

Type locality: Taveta, 750 m., BRITISH EAST AFRICA (Alluaud and Jeannel).

31. **Polyrhachis (Myrma) schoutedeni** SANTSCHI, 1919, Rev. Zool. Afr., VI, p. 249 (♀).

Type locality: Dolo, BELGIAN CONGO (F. Chaltin).

32. **Polyrhachis (Myrma) spinicola** FOREL.

*Polyrhachis spinicola* FOREL, 1894, Mitth. Schweiz. Ent. Ges., IX, p. 70 (♀, ♀). EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 777.

Type locality: Delagoa, PORTUGUESE EAST AFRICA (Junod).

PORTUGUESE EAST AFRICA: Muculla (A. Müller).

33. **Polyrhachis (Myrma) spitteleri** FOREL, 1916, Rev. Suisse Zool., XXIV, p. 450, fig. 6 (♀).

Type locality: BELGIAN CONGO (Kohl).

34. **Polyrhachis (Myrma) sulcata** ERN. ANDRÉ.

*Polyrhachis sulcata* ERN. ANDRÉ, 1895, Rev. d'Ent. Caen, XIV, p. 1 (♀). MAYR, 1895, Ann. Naturh. Hofmus. Wien, X, p. 154 (♀): EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 777.

Type locality: Ogowé, FRENCH CONGO (Mocquerys).

CAMEROON: (H. Brauns). BELGIAN CONGO.

35. **Polyrhachis (Myrma) viscosa** F. SMITH. SANTSCHI, 1914, 'Voy. Alluaud et Jeannel Afr. Orient., Formicidae,' p. 143 (♀, ♀). See p. 267.

*Polyrhachis viscosus* F. SMITH, 1858, 'Cat. Hym. Brit. Mus.,' VI, p. 71 (♀), Pl. IV, fig. 41. ROGER, 1863, 'Verzeich. Formicid.,' p. 6. MAYR, 1863, Verh. Zool. Bot. Ges. Wien, XIII, p. 447; 1886, *ibid.*, XXXVI, p. 357. ERN. ANDRÉ, 1887, Rev. d'Ent. Caen, VI, p. 287 (♀). DALLA TORRE, 1893, 'Cat. Hym.,' VII, p. 271. EMERY, 1896, Mem. Accad. Sc. Bologna, (5) V, p. 777; 1897, Ann. Mus. Civ. Genova, XXXVIII, p. 605 (♀, ♀); 1899, *ibid.*, XXXIX, p. 501 (♀). FOREL, in Voeltzkow, 1907, 'Reise in Ostafrika,' II, p. 92 (♀); 1910, Zool. Jahrb. Abt. Syst., XXIX, p. 272 (♀); 1913, Ann. Soc. Ent. Belgique, LVII, p. 143 (♀, ♀).

*Polyrhachis antinorii* EMERY, 1877, Ann. Mus. Civ. Genova, IX, p. 365, fig. (♀). ERN. ANDRÉ, 1887, Rev. d'Ent. Caen, VI, p. 287 (♀).

Type locality: Port Natal, NATAL.

SOUTHERN RHODESIA: Redbank (G. Arnold). GERMAN EAST AFRICA: Mafia Island (Voeltzkow). BRITISH EAST AFRICA: Voi, Taita; Bura, 1050 m. (Alluaud and Jeannel). SOMALILAND: Magala Re Umberto (Ruspoli). ABYSSINIA: Dimé to Bass Narok (V. Bottego); Coromma; Ganale (Ruspoli). ERITREA: Sciotel; Keren (Beccari); Ghinda (K. Escherich). BELGIAN CONGO: Ngayu (Lang and Chapin).

36. **Polyrhachis (Myrma) weissii** SANTSCHI.

*Polyrhachis weissii* SANTSCHI, 1910, Ann. Soc. Ent. France, LXXVIII, (1909), p. 395, fig. 18 (♀).

Type locality: Brazzaville, FRENCH CONGO (A. Weiss).

37. **Polyrhachis (Myrma) wellmani** FOREL.

*Polyrhachis wellmani* FOREL, 1909, Ann. Soc. Ent. Belgique, LIII, p. 68 (♀).

Type locality: BENGUELA (C. Wellman).